



WORKFORCE INVESTMENT BOARD OF VENTURA COUNTY

CLEAN/GREEN COMMITTEE MEETING

Friday, June 6, 2014

8:00 a.m. - 9:30 a.m.

Ventura County Community Foundation (VCCF) Nonprofit Center
4001 Mission Oaks Blvd., (Board Room), Camarillo

AGENDA

8:00 a.m.	1.0 Call to Order and Agenda Review	Kimberly Nilsson
8:02 a.m.	2.0 Public Comments <u>Procedure:</u> The public is welcome to comment. All comments not related to items on the agenda may be made at the beginning of the meeting only.	
8:05 a.m.	3.0 Approval of Minutes: April 25, 2014	Kimberly Nilsson
8:06 a.m.	4.0 Green Certifications	John Brooks
	5.0 Ventura County Regional Strategic Workforce Development Plan	
8:20 a.m.	<ul style="list-style-type: none">• Infrastructure Work Group	Dave Fleisch
8:35 a.m.	<ul style="list-style-type: none">• Services Work Group	Teresa Johnson
8:50 a.m.	<ul style="list-style-type: none">• Next Steps	Committee Members
9:05 a.m.	6.0 Oregon's Career Pathways	Patricia Duffy
9:15 a.m.	7.0 2014-2015 Meeting Calendar	Kimberly Nilsson
9:25 a.m.	8.0 Committee Member Comments	Committee Members
9:30 a.m.	9.0 Adjournment <u>Next Meeting</u> TBA (8:00 a.m.-9:30 a.m.) Ventura County Community Foundation (VCCF) Nonprofit Center 4001 Mission Oaks Blvd. (Community Room), Camarillo	Kimberly Nilsson

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WIB Clean/Green Committee Meeting
April 25, 2014

MINUTES

Meeting Attendees

Committee

Victor Dollar (Chair)*
John Brooks
F. Paul Chounet
Rebekah Evans
Dave Fleisch
Teresa Johnson*
Valeria Makarova
Tiffany Morse
Sharon Woolley

WIB Staff

Talia Barrera
Patricia Duffy
Jennifer Harkey
Cheryl Moore

Guests

Olivia Cancino (Oxnard City Corps)
Eric Humel (Oxnard City Corps)
Margaret Lau (Allan Hancock College and
Deputy Sector Navigator)
Alan Young (A. Young Group)

**WIB Members*

1.0 Call to Order

Victor Dollar called the meeting to order at 8:05 a.m. No changes were made to the agenda.

2.0 Public Comments

No comments

3.0 Approval of Minutes: March 28, 2014

Motion to approve: John Brooks
Second: F. Paul Chounet
Abstain: Dave Fleisch
Motion carried

4.0 Clean/Green Committee Spotlight: Oxnard City Corps

Eric Humel and Olivia Cancino explained how the non-profit offers training and service learning projects for career pathways. Volunteers get involved in hands-on service learning projects and then move into a part-time or full-time job. The projects allow students to experience different jobs in local agencies as they look for a career. College graduates may not always have the work experience needed to get a job but they do have the education in the industry, so Oxnard City Corps also takes those students to give them the opportunity to gain experience in the field. The students assist with the website and updating materials to increase their skills.

Oxnard City Corps employee, Olivia Cancino, described her experience of joining as a volunteer while attending high school, with an interest in environmental studies. She completed her college degree in biology while working on the Oxnard Recycled Water Program, which focuses on sustainable systems for water conservation to maintain and restore Oxnard's natural habitat.

Committee members asked questions and discussed potential projects. Mr. Humel explained that Oxnard City Corps has completed projects throughout Ventura County and in other areas, so they are not limited to the City of Oxnard.

5.0 Ventura County Regional Strategic Workforce Development Plan (Plan)

- Infrastructure Work Group: Participants in the work group presented a new, “general” Clean/Green Readiness Soft Skills Categories outline (attached) for the basic skills needed for a sustainability certification program and expressed the need to identify courses available and gaps. John Brooks and Dave Fleisch stressed the importance of integrating sustainability curriculum into K-12 education. Committee members discussed the need for more outreach services to make employers aware of the importance of sustainable practices in businesses.
- Services Work Group: Valeria Makarova helped the Committee to understand “clean/green” more clearly by preparing an informative literature review (attached), which included an explanation of the five categories of sustainability skills needed.

Teresa Johnson discussed the Ventura Adult and Continuing Education (VACE) training offered to older youth in the Workforce Investment Act (WIA) program at VACE. Ms. Johnson described the National Work Readiness certificate, which includes soft skills. Ms. Johnson also explained the WorkKeys National Certification which helps students to learn applied math, science, technology and focuses on job ready skills. Committee members agreed that soft skills need to be tied into the basic skills needed to get people into jobs, especially at the entry level for many industries. The focus should begin with high school students.

- Staffing Services Research: Talia Barrera reported that there are many staffing services programs in Ventura County which provide training to job-seekers at no cost, and they might be willing to do the same for youth as well. Local staffing services use the Virtual One-Stop system to obtain information on potential candidates that have previously registered at the Job & Career Centers. Committee members asked questions regarding the services provided by these companies. Ms Barrera noted that local staffing services offer computer training and transportation for temporary staff. Committee members also discussed the availability of online training, such as Lynda.com, Skillsoft, and Learning Express Library.
- Next Steps: Given the wide range of business needs and workforce development options in the Clean/Green industry, the Committee agreed to take a disciplined approach to action. Wall notes from the discussion included the following and will be refined at the next meeting:
 - Establish a mission statement prior to moving forward.
 - Determine next steps to build on/apply the Infrastructure job readiness skills matrix to the Clean/Green industry in general.
 - Expand the Ventura County industry cluster education matrix by including programs, certificates, and credentials offered by universities, labor unions, and others.
 - Create a handout/post information on a website for youth and job seekers that shows career pathways in clean/green-related jobs—training, certificates, apprenticeships, internships, credentials—for students to know where to go next. (Note: See www.vcjobswithafuture.org.)
 - Offer mentorships with local employers to those interested in the field.
 - Convene a cross-sector meeting or webinar to help the sector committees (Clean/Green, Healthcare, Manufacturing) get up to speed on what is available in Ventura County, including what the staffing service industry offers.

6.0 Oregon's Career Pathways

Patricia Duffy introduced a useful website created by the State of Oregon Community Colleges and Workforce Development: "Oregon Green Career Pathways" at www.oregongreenpathways.org. Committee members were encouraged to visit the website, which defines specific occupations and skills required. Each career path provides information on the local courses, certificates, and degrees available at the community colleges, as well as apprenticeship programs.

7.0 Committee Member Comments

Committee Chair Victor Dollar recommended that WIB staff should confirm the date for the next Clean/Green meeting, as May 23, 2014 is the Friday of Memorial Day weekend. WIB staff will conduct a Doodle Poll via email to confirm.

8.0 Adjournment

The Committee adjourned at 9:35 a.m.

Next Meeting

Changed to June 6, 2014 (8:00 a.m.-9:30 p.m.)
VCCF Nonprofit Center (Community Room)
4001 Mission Oaks Blvd., Camarillo



CLEAN/GREEN READINESS SOFT SKILL CATEGORIES

Workforce Investment Board of Ventura County

BASICS OF QUALITY CONTROL	SOFT SKILLS	COMPUTER SKILLS
<ul style="list-style-type: none">• Know processes, as applicable, per business• Basic quality methodology and inspection techniques• Importance of individual responsibility – to do it right the first time• Manufacturing theory and quality control• Lean manufacturing and quality control• Knowledge of regulations and systems processes• Knowledge of waste management – waste reduction advantages• Certification and best practices	<ul style="list-style-type: none">• Initiative• Basics of interviewing• Work ethic• Communication skills• Continuous improvement skills• Basic company policy understanding• Time management• Task prioritization• Worker, supervisor, manager etiquette and protocol basics• Opportunities for work experience – applications of skills in work settings• Apprenticeships- knowledge sustainable career pathways and paid training opportunities	<ul style="list-style-type: none">• Microsoft Excel• Microsoft Word• Microsoft Access• Operating System basics• Computer navigation• Computer security• Computer etiquette• ERP basics• Viewer basics like PDF, CAD, jpg, png, bmp, TIFF, Solid Works, etc.• File extension basics• Basic programming

Literature Review for the ‘Service Group’: jobs, skills, gaps, action plans

More and more companies in emerging green industries are moving out of research and development into manufacturing and product/service launch. Strategic training programs must be developed to ensure that employees have the skills and training they need to do the jobs as they become available.

As the green economy evolves, various terms for green jobs/careers are being proposed. Different groups have different definitions for the same terms. For instance, some use the term green collar jobs to include **any job that improves environmental quality**. Others use green collar jobs to describe *blue collar trade jobs that are provided by companies that have environmental quality as their goal*.

The Green Job Act of 2007, which was signed into law on December 19, 2007, refers to green collar jobs as energy efficiency retrofit and service, green building construction, and solar panel installation (Solis, 2007) Although green collar jobs are essential to a thriving green economy, they do not adequately describe all of the necessary positions. Green professional jobs, including scientists, researchers, managers, marketers, sales people, designers, administrators etc, are also critical to the success of the green economy.

Defining Green

Deciding which jobs are green and which are not is another gray area. According to the Green Jobs report (United Nations Environment Programme et al., 2008) **green jobs reduce the environmental impact of enterprises and economic sectors, ultimately to levels that are sustainable (p 5).**

In preserving and restoring the quality of the environment, green jobs and green companies will employ a combination of strategies to reach their goal:

- Generate and use clean energy
- Conserve energy, water, and raw resources
- Lower greenhouse gas emissions
- Minimize waste and pollution
- Decrease use of hazardous materials as inputs and outputs
- Remediate/reverse human impact on the planet
- Follow sustainable practices
- Promote biodiversity and restore ecosystems

Understanding the Array of Green Functions

Another way to determine whether a job/company is green is to *focus on the functions being performed*. This list provides an overview of the functions required to have a positive impact on the environment. Following each function, in parentheses, are job titles that embody that function.

- Care for the earth, natural resources, wildlife (conservationist, environmentalist)
- Design and implement green infrastructure? IT, distribution channels (logistics specialist, systems specialist)

- Design and manufacture green products, materials, and processes (designer, inventor, manufacturer)
- Educate and inspire (teacher, writer)
- Generate clean, renewable energy (solar sales consultant, wind resource assessment specialist)
- Help companies and organizations green their business (sustainability consultant, in house sustainability manager)
- Motivate and persuade people to take green actions (marketing director, sales manager)
- Provide green services (event planner, real estate broker)
- Remodel, retrofit, build green buildings and spaces (contractor, green rater)
- Secure funding, invest (investor, fundraiser, financial planner)
- Set policy, regulate, advocate (advocate, policy maker)

Where Are the Green Jobs/Careers?

The green economy is already far too diverse and expansive. New industries are forming. Existing green industries are maturing at varying rates.

Green industries tend to fall into five categories:

- 1. Traditional Environmental Sciences**
- 2. Natural Resource Management Industries**
- 3. Emerging Industries**
- 4. Traditional Industries Greening Their Products and Services**
- 5. Traditional Companies Becoming Sustainable**

By understanding the framework of green industries, green career seekers can focus their attention on the industry categories that interest them and fit their skills and experience. In addition they can refine their job search strategies to match each industry category's unique characteristics.

1. Traditional Environmental Sciences

The modern environmental movement spurred the growth of this sector in the 1970s when the Clean Air Act and the Environmental Policy Act were signed into law and needed to be enforced by those with environmental training. Later, hazardous waste management and solid waste management became the focus with an emphasis on clean up and remediation.

Now several decades later, in large part due to the critical goal of combating global warming, a number of environmental science positions are considered to be among the hottest jobs by the U.S. Department of Labor (Environmental Careers). Those in this industry may work in governmental agencies, nonprofit organizations, academia, or private industry in an array of positions that allow them to conserve, preserve, protect and restore the environment. Primarily they are researching key environmental issues, identifying solutions to environmental problems or assessing the environmental impact of a proposed change.

Examples of Industries

- Environmental Science
- Conservation Biology
- Ecology
- Industrial Ecology
- Ecological Restoration
- Agroecology
- Climatology

Green career seekers who want to make a contribution in this industry category **must have a scientific degree, be willing to work outdoors, collect data, analyze data, interpret data and communicate findings**. The entire field is built on systems thinking. As a result, green career seekers must be able to look at the whole picture and trace the impact of various environmental factors beyond the boundaries of their personal specialty.

2. Natural Resource Management Industries

Although the focus of these industries ranges from air, water and waste to the land, forests, and wildlife, several characteristics are quite similar across the board. Generally speaking workers in this industry category **work for governmental agencies at all levels or consulting firms**. Whatever the setting, it is likely that the work will be shaped by environmental regulations and industry specific laws. Due to the health risks inherent with poorly managed resources, assessing and maintaining high quality standards is critical in this field whether the goal is to restore the natural resource to its pure state or distribute it to the community.

Examples of Industries

- Air: quality control, emissions compliance, trading, and offsets
- Natural gas: transmission, distribution
- Water: treatment, conservation, wastewater treatment, and water management
- Waste: management, waste collection, waste transportation, waste processing, waste diversion, recycling, hazardous and nuclear
- Land: conservation, remediation, land use, land trust management, restoration, soil analysis, and conservation
- Forests: conserve, manage, protect and restore forests
- Wildlife: conserve, manage, protect and restore habitats for wildlife

Depending on the specific industry, workers may be required to work swing shifts, split shifts, overtime or respond quickly in times of disasters. To ensure safety standards are followed, training is required. Another unique component of working in this industry category is the *focus on upholding specific laws and meeting industry regulations*.

3. Emerging Green Industries

The industry category that is generating the most excitement and interest is based on innovation. This category is like the Wild, Wild West. **Most of the companies in this category are start ups or early stage companies.** Their main push is to confirm they have a product/service that works and can be scaled effectively. To succeed, these companies are always on a quest for more funding.

Examples of Industries

- Air and Environment
- Clean Energy Generation, including solar, wind, geothermal, marine
- Clean Manufacturing and Clean Products
- Energy Efficiency and Energy Management
- Energy Infrastructure and Distribution
- Energy Storage
- Green Automobiles and Transportation
- Green Materials, Green Building
- Green Nanotech, Synthetic Genomics
- Resource Recovery and Waste Management
- Water Technology and Management

Green career seekers who want to work in an emerging industry must have the technical knowledge to innovate within the field of their choice. In addition, they must have the personality and work style to thrive in a fast-paced environment that is shaped by competition, evolving technology, failures, and the changing external landscape. Creativity, doing whatever needs to be done in the moment, problem solving, and prioritizing are critical contributors to success in these start up/early stage companies.

4. Traditional Industries Greening Their Products and Services

The companies in this industry category are typically implementing innovations developed by an emerging company (or in-house department). To achieve their goal, they may have switched energy sources, made changes in their supply chain, modified their manufacturing process, transformed the service they provide, changed how they distribute their products, and evaluated the entire life cycle of their products/services. Changes made in their own organization often trickle down to their vendors, suppliers, and distributors. For the most part, job titles in these industries do not differ from those found in traditional companies. It is how the employees approach their work that has changed.

Examples of Industries

- Green Buildings
- Green IT
- Green Printing

- Green Real Estate
- Green Financial
- Green Hospitality and Event Planning

Companies in this category may be very large multinational companies, national companies, or small local companies. In addition to being able to perform the basic job, employees in this industry category must have the ability to look at standard operating procedures to find ways to cut waste, gain efficiencies, use renewable resources, and green the distribution methods. Additional training **and certifications** may be required to remain competitive in these industries.

MAJOR SOURCE:

Author: McClelland, Carol

Title: MAKING SENSE OF THE NEW GREEN CAREER FRONTIER: A Framework of Green Industries

Source: Career Plann Adult Dev J; Summer 2008; 24, 2; pg. 48-58

References

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Cohen, B. & Warwick, M (2006). *Values-driven business: How to change the world, make money, and have fun*. San Francisco, BerrettKoehler Publishers, Inc.

Esty, D. C. & Winston, A. S. (2006). *Green to gold: How smart companies use environmental strategy to innovate, create value, and build competitive advantage*. New Haven: Yale University Press.

Greenhouse, S. (2008, March 26). *Millions of jobs of a different collar*. New York Times, Retrieved September 25, 2008 from www.nytimes.com

Jones, V. (2008). *The green collar economy: How one solution can fix our two biggest problems*. New York: HarperOne.

Pickens, T. B. (2008). Pickens Plan. Retrieved at www.pickensplan.com

Pollin, R. & Wicks-Lim, J. (2008). *Job opportunities for the green economy: A state-by-state picture of occupations that gain from green investments*. University of Massachusetts, Amherst: Political Economy Research Institute. Retrieved from www.americanprogress.org

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United Nations Environmental Programme (UNEP), International Labour Office (ILO), International Trade Union Confederation (ITUC), & International Organization of Employers (IOE). (2008). *Green jobs: Towards decent work in a sustainable, low-carbon world*. Washington, DC: Worldwatch Institute. Retrieved from www.unep.org

Recommended Environmental Programs "Green" Certification List									
Industry	Certifying Body	Certification	Relevance	Local training(s)	Statewide training	ANSI Accredited	Links for more information/ Website	Notes	Feedback/ Comments
Building/Construction	http://www.epacampus.com/epa-green-infrastructure-training/	Green Infrastructure Compliance Certification							
Building/Construction	http://nrmca.org/Education/Certifications/Sustainability.htm	Concrete Sustainability Specialist Certification							
Building/Construction	http://nrmca.org/Education/Certifications/Sustainability.htm	Pervious Concrete Contractor Certification							
Eco Tourism	http://www.green-tourism.com/	Goldstar	https://www.ecogreenhotel.com/ecogreen-newsletter/EGH_Jan/green_certifications.html						
Eco Tourism	http://www.ecorooms.com/	Eco Rooms/Eco Suites Certification	https://www.ecogreenhotel.com/ecogreen-newsletter/EGH_Jan/green_certifications.html						
Eco Tourism	http://www.auduboninternational.org/green-lodging	Green Leaf Certification	https://www.ecogreenhotel.com/ecogreen-newsletter/EGH_Jan/green_certifications.html						
Eco Tourism	http://www.greenseal.org/	Green Seal Certification	https://www.ecogreenhotel.com/ecogreen-newsletter/EGH_Jan/green_certifications.html						
Eco Tourism	http://greenkeyglobal.com/	Green Key Certification	https://www.ecogreenhotel.com/ecogreen-newsletter/EGH_Jan/green_certifications.html						
Landscape/Water	http://clca.us/water/index.html	WaterSense Certification	http://www.irrigation.org/watersense_parts/						
Plumbing	http://www.iapmo.org/Pages/IAPMOgroup.aspx	Green Plumbing Certification	http://www.greenplumberstraining.org/Pages/GreenPlumbersTrainingCertification.aspx	http://www.greenplumbersusa.com/web/guest-green-plumber-water-conservation-training					
Textile Services	http://www.trsa.org/cleangreen	Clean Green TRSA Certification	http://www.trsa.org/page/trsa-initiated-astm-international-standard						
Waste Management	http://www.crra.us/	California Resource Recovery Assn. (CRRRA) Certification					http://greeneducationhub.org/		
Waste Management	https://www.uclaextension.edu/pages/fos/sustainabilityprograms.aspx	UCLA Sustainability Certification					https://www.uclaextension.edu/pages/fos/sustainabilityprograms.aspx		
Waste Management	http://www.barstowca.org/index.php/master-composter-certification	Master Composter Certification					http://www.barstowca.org/index.php/master-composter-certification		
Waste Management	http://www.thesoilguy.com/SG/ComposterCourses	Master Composter Certification					http://www.thesoilguy.com/SG/ComposterCourses		
Waste Management		Hazwoper					http://www.natlenvtrainers.com/40-hour-hazwoper.htm		
Waste Management		SWANA Certifications					https://swana.org/Certification.aspx		
Waste Management		Ventura County Master Gardner Certification					http://camastergardeners.ucanr.edu		
Waste Management		Recycling and Solid Waste Management Certificate					https://www.uclaextension.edu/pages/ProgramDetails.aspx?req=CF555		
Waste Management		Certification in HHW Collection Operations							
Waste Management		Certification in CESQG Collection Operations							
Waste Management	http://www.uszwbc.org/certification	US Zero Waste Business Certification					www.uszwbc.org/certification		
Waste Management		RCRA/DOT Training					http://www.go2cwa.org/RCRA_DOT/rcra_dot.html		
Waste Management		DOT Hazrdous Materials Training/HazMat CA					http://www.ercweb.com/classes/location.aspx?id=46		
Waste Management		RCRA Certification					http://www.lion.com/Hazardous-Waste-in-California-Workshop?start=CAHWgoogle&qclid=CNSf_8ias7wCFUiGfgodUVoAhQ		
Waste Management	http://green.usc.edu/content/zero-waste-tailgate-certification-program-0	USC Zero Waste Tailgate Certification					http://green.usc.edu/content/zero-waste-tailgate-certification-program-0		
Water	http://watershedmq.org/tech-trainings	Watershed Management Certification					http://www.greenplumberstraining.org/Pages/GreenPlumbersTrainingCertification.aspx		
Water	http://watershedmq.org/tech-trainings	Water Harvesting Certification							
Water		Water							
Water	California Water Environmenta Association	CWEA Wastewater Treatment Certification					http://www.cwea.org/cert_howcert.shtml		
Water		EPA Storm Water Management Certification						http://www.environmentaltrainingonlineepa.org/?	
Water	http://greywateraction.org/content/greywater-installers-course	Greywater Action Training Course							
		Efficiency Sales Professional™ (ESP) Certificate Program					http://www.eefq.com/esp-cert		
		Environmental Management System Standard ISO 14001					www.dnvcert.com	http://www.iso.org/iso/home/standards/certification.htm	
	http://www.ohsas-18001-occupational-health-and-safety.com/	OSHA 18001					http://www.csudh.edu/osha/		
		CARB Compliance Training Program					https://ssl.arb.ca.gov/training/training.htm		
		Cal/EPA DTSC CA Hazardous Materials Classification					http://ccelearn.csus.edu/wasteclass/intro/intro_01.html		












Draft Only















CLEAN/GREEN INFRASTRUCTURE READINESS SKILL CATEGORIES
Workforce Investment Board of Ventura County

SAFETY	MATH CONCEPTS	MEASUREMENTS	HAND AND POWER TOOLS
<ul style="list-style-type: none">• General workplace safety• Electrical safety including Lock-out/Tag-out procedures• Worker safety• Equipment safety• Climbing/ladder safety• Power tool safety• Safety data sheets• OSHA10• First aid/CPR/AED	<ul style="list-style-type: none">• Addition and subtraction of fractions• Combined operations of fractions and mixed numbers• Algebraic operations of addition, subtraction and multiplication• Ratios and proportions• Table of decimal equivalents and combined operations of decimals• Degree of precision, tolerance and clearances	<ul style="list-style-type: none">• Standards• Units of measurement• Tape measure use• Measuring for cutting materials• Basic layout (surveying)• Mass and weight measurement• Measuring fluids• Measuring solid materials (sand, cement, etc.)	<ul style="list-style-type: none">• Tape measures, squares and levels• Basic hand tools – saws, hammers, screw drivers, wrenches• Power tools – saws, drills, screwdrivers• Pneumatic drills and nail guns• Powder actuated tools• Laser equipment
SUSTAINABILITY AND QUALITY	BLUEPRINT CONCEPTS	SOFT SKILLS	COMPUTER SKILLS
<ul style="list-style-type: none">• Sustainable work processes:<ul style="list-style-type: none">○ Conservation○ Reuse○ Recycle○ Repurpose○ Reduce○ Economy of use/right-sizing• Importance of individual – do it right the first time• Continuous process improvement for green purposes	<ul style="list-style-type: none">• Introduction basic construction drawings• Basic blueprint reading• Understanding different drawing types:<ul style="list-style-type: none">○ Civil○ Electrical○ Mechanical○ Repair/renovation○ New construction	<ul style="list-style-type: none">• Basics of interviewing• Work ethic• Oral communication• Written communication• Time management• Task prioritization• Worker, supervisor, manager etiquette and protocol basics• Basic company policy understanding	<ul style="list-style-type: none">• Excel• Word• OS basics• Computer navigation• Computer security• Computer etiquette• Viewer basics, PDF, CAD, jpg, png, bmp, TIFF, Solid Works, etc.• File extension basics

Ventura County Occupational Employment Data Growth Projections CLEAN/GREEN (Infrastructure Subcommittee)








SOC Code*	U.S. D.O.L. Green Jobs in Demand	Occupations	2013 Education and Training Level**	2010 VENTURA COUNTY Median Annual Wages***	2020 CALIFORNIA Employment Growth Projection	CALIFORNIA Average Annual Job Openings****	2020 VENTURA COUNTY Employment Growth Projection	VENTURA COUNTY Average Annual Job Replacement Openings	VENTURA COUNTY Average Annual Job Openings****	2010 CALIFORNIA Average Annual Employment	2010 VENTURA COUNTY Average Annual Employment
53-7064		Packers and Packagers, Hand	Less Than H.S.	\$19,720	15.7	4,140	14.8	54	82	93,500	1,890
51-9198		Helpers--Production Workers	Less Than H.S.	\$21,855	7.9	970	14.3	12	22	39,400	700
45-2091		Agricultural Equipment Operators	Less Than H.S.	\$22,250	2.1	470	32.1	26	53	14,000	840
45-2000		Agricultural Workers	Less Than H.S.	\$24,000	1.7	9,460	21.5	504	864	297,300	16,740
47-3019		Helpers, Construction Trades, All Other	Less Than H.S.	\$24,130	23.8	110	32.5	10	23	2,100	400
53-7062		Laborers and Freight, Stock, and Material Movers, Hand	Less Than H.S.	\$24,943	19.7	12,030	19.5	108	174	232,700	3,380
37-3011		Landscaping and Groundskeeping Workers	Less Than H.S.	\$25,024	21.6	5,440	15.8	77	146	138,500	4,370
47-3014		Helpers--Painters, Paperhangers, Plasterers, and Stucco Masons	Less Than H.S.	\$25,926	23.1	120	N/A	N/A	N/A	2,600	N/A
47-3016		Helpers--Roofers	Less Than H.S.	\$29,219	-7.7	30	N/A	N/A	N/A	1,300	N/A
47-3011		Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	Less Than H.S.	\$30,164	45.7	260	N/A	N/A	N/A	3,500	N/A
47-3012		Helpers--Carpenters	Less Than H.S.	\$30,908	51.6	240	N/A	N/A	N/A	3,100	N/A
53-7051		Industrial Truck and Tractor Operators	Less Than H.S.	\$33,995	15.2	2,570	19.6	40	68	59,100	1,430
47-2061		Construction Laborers	Less Than H.S.	\$38,491	19.5	3,020	24.3	17	69	109,500	2,140
53-7081		Refuse and Recyclable Material Collectors	Less Than H.S.	\$42,486	21.7	780	N/A	N/A	N/A	15,200	N/A
47-2181		Roofers	Less Than H.S.	\$48,253	3.0	400	13.9	7	12	16,800	360
45-4011		Forest and Conservation Workers	H.S. Diploma + OJT	\$21,072	0.0	90	0.0	3	3	3,600	130
49-9098		Helpers--Installation, Maintenance, and Repair Workers	H.S. Diploma + OJT	\$24,772	16.9	820	17.4	10	14	13,000	230
51-2092		Team Assemblers	H.S. Diploma + OJT	\$25,210	8.8	2,180	7.7	41	58	76,400	2,070
51-2099		Assemblers and Fabricators	H.S. Diploma + OJT	\$27,555	11.2	740	12.4	21	33	24,200	1,050
51-2023		Electromechanical Equipment Assemblers	H.S. Diploma + OJT	\$28,493	13.3	170	0.0	2	3	6,000	130
51-9032		Cutting and Slicing Machine Setters, Operators, and Tenders	H.S. Diploma + OJT	\$29,329	-2.0	110	8.3	3	4	5,100	120

Ventura County Occupational Employment Data Growth Projections CLEAN/GREEN (Infrastructure Subcommittee)












SOC Code*	U.S. D.O.L. Green Jobs in Demand	Occupations	2013 Education and Training Level**	2010 VENTURA COUNTY Median Annual Wages***	2020 CALIFORNIA Employment Growth Projection	CALIFORNIA Average Annual Job Openings****	2020 VENTURA COUNTY Employment Growth Projection	VENTURA COUNTY Average Annual Job Replacement Openings	VENTURA COUNTY Average Annual Job Openings****	2010 CALIFORNIA Average Annual Employment	2010 VENTURA COUNTY Average Annual Employment
43-5071		Shipping, Receiving, and Traffic Clerks	H.S. Diploma + OJT	\$29,778	5.6	2,790	4.3	53	62	89,900	2,070
51-2022		Electrical and Electronic Equipment Assemblers	H.S. Diploma + OJT	\$29,870	12.2	580	-3.6	20	20	22,200	1,370
47-3015		Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	H.S. Diploma + OJT	\$31,266	36.4	210	N/A	N/A	N/A	3,300	N/A
47-3013		Helpers--Electricians	H.S. Diploma + OJT	\$31,452	21.4	190	27.8	5	10	4,200	180
51-2031		Engine and Other Machine Assemblers	H.S. Diploma + OJT	\$33,638	14.3	50	0.0	1	2	1,400	60
51-9061		Inspectors, Testers, Sorters, Samplers, and Weighers	H.S. Diploma + OJT	\$36,100	13.4	1,690	7.8	33	45	47,900	1,540
43-4051		Customer Service Representatives	H.S. Diploma + OJT	\$36,347	18.6	9,260	22.1	122	217	197,300	4,300
51-4011		Computer-Controlled Machine Tool Operators, Metal and Plastic	H.S. Diploma + OJT	\$36,514	21.1	390	16.7	3	7	9,500	180
51-4121		Welders, Cutters, Solderers, and Brazers	H.S. Diploma + OJT	\$37,621	11.1	820	20.4	13	23	21,700	490
49-9071		Maintenance and Repair Workers, General	H.S. Diploma + OJT	\$38,449	12.7	3,510	11.2	36	58	113,000	1,960
53-6099		Transportation Workers, All Other	H.S. Diploma + OJT	\$40,194	16.0	230	18.2	7	11	5,000	220
51-4041		Machinists	H.S. Diploma + OJT	\$40,242	13.1	950	10.0	15	23	30,500	800
47-4041		Hazardous Materials Removal Workers	H.S. Diploma + OJT	\$40,284	18.6	190	0.0	2	3	4,300	60
49-9043		Maintenance Workers, Machinery	H.S. Diploma + OJT	\$40,578	4.9	140	12.5	3	5	6,100	160
53-3021		Bus Drivers, Transit and Intercity	H.S. Diploma + OJT	\$41,747	14.3	890	6.3	9	11	26,600	480
51-9011		Chemical Equipment Operators and Tenders	H.S. Diploma + OJT	\$44,949	8.0	60	N/A	N/A	N/A	2,500	N/A
43-5061		Production, Planning, and Expediting Clerks	H.S. Diploma + OJT	\$48,503	9.6	1,390	4.5	17	21	38,600	660
13-1022		Wholesale and Retail Buyers, Farm Products	H.S. Diploma + OJT	\$51,604	17.0	680	18.5	7	13	15,900	270
47-2152		Plumbers, Pipefitters, and Steamfitters	H.S. Diploma + OJT	\$53,543	17.2	1,670	26.7	17	33	36,100	600
47-2111		Electricians	H.S. Diploma + OJT	\$60,216	15.7	2,010	22.1	18	33	47,200	680
51-8021		Stationary Engineers and Boiler Operators	H.S. Diploma + OJT	\$64,384	5.9	100	0.0	1	1	3,400	60

Ventura County Occupational Employment Data Growth Projections






CLEAN/GREEN (Infrastructure Subcommittee)

SOC Code*	U.S. D.O.L. Green Jobs in Demand	Occupations	2013 Education and Training Level**	2010 VENTURA COUNTY Median Annual Wages***	2020 CALIFORNIA Employment Growth Projection	CALIFORNIA Average Annual Job Openings****	2020 VENTURA COUNTY Employment Growth Projection	VENTURA COUNTY Average Annual Job Replacement Openings	VENTURA COUNTY Average Annual Job Openings****	2010 CALIFORNIA Average Annual Employment	2010 VENTURA COUNTY Average Annual Employment
47-2073		Operating Engineers and Other Construction Equipment Operators	H.S. Diploma + OJT	\$65,711	23.1	1,020	28.1	13	29	22,100	570
13-1199		Business Operations Specialists, All Other	H.S. Diploma + OJT	\$67,213	13.6	4,560	14.6	60	106	139,100	3,150
47-4011		Construction and Building Inspectors	H.S. Diploma + OJT	\$72,234	18.6	470	13.6	6	9	9,700	220
47-1011		First-Line Supervisors of Construction Trades and Extraction Workers	H.S. Diploma + OJT	\$73,957	21.7	2,060	26.4	1	43	46,000	870
11-3071		Transportation, Storage, and Distribution Managers	H.S. Diploma + OJT	\$84,677	14.0	460	14.3	5	9	12,100	210
51-8013		Power Plant Operators	H.S. Diploma + OJT	\$84,797	12.1	160	0.0	2	2	3,300	50
11-9199		Managers, All Other	H.S. Diploma + OJT	\$119,786	11.7	2,980	14.0	52	84	87,900	2,360
49-2092		Electric Motor, Power Tool, and Related Repairers	Vocational / OJT	\$41,903	7.7	20	N/A	N/A	N/A	1,300	N/A
49-9021		Heating, Air Conditioning, and Refrigeration Mechanics and Installers	Vocational / OJT	\$51,356	27.1	920	27.5	9	23	20,700	510
49-2094		Electrical and Electronics Repairers, Commercial and Industrial Equipment	Vocational / OJT	\$59,680	10.6	230	0.0	3	3	6,600	140
49-2095		Electrical and Electronics Repairers, Powerhouse, Substation, and Relay	Vocational / OJT	\$83,825	25.0	60	N/A	N/A	N/A	1,200	N/A
19-4011		Agricultural and Food Science Technicians	Associate's Degree	\$31,656	6.7	130	12.5	3	4	3,000	80
19-4093		Forest and Conservation Technicians	Associate's Degree	\$36,126	-2.7	310	-7.1	6	6	7,400	140
19-4031		Chemical Technicians	Associate's Degree	\$44,018	14.5	180	N/A	N/A	N/A	6,200	N/A
19-4091		Environmental Science and Protection Technicians, Including Health	Associate's Degree	\$50,108	26.5	230	37.5	3	6	3,400	80
17-3026		Industrial Engineering Technicians	Associate's Degree	\$51,790	15.6	160	N/A	N/A	N/A	4,500	
17-3024		Electro-Mechanical Technicians	Associate's Degree	\$52,618	13.9	120	N/A	N/A	N/A	3,600	
17-3011		Architectural and Civil Drafters	Associate's Degree	\$54,227	-0.8	250	0.0	3	3	12,700	170
17-3013		Mechanical Drafters	Associate's Degree	\$54,580	10.4	140	13.3	3	5	4,800	150
17-3012		Electrical and Electronics Drafters	Associate's Degree	\$55,771	10.0	120	0.0	2	3	4,000	120
17-3027		Mechanical Engineering Technicians	Associate's Degree	\$56,163	10.0	110	6.7	3	4	4,000	150

Ventura County Occupational Employment Data Growth Projections CLEAN/GREEN (Infrastructure Subcommittee)

SOC Code*	U.S. D.O.L. Green Jobs in Demand	Occupations	2013 Education and Training Level**	2010 VENTURA COUNTY Median Annual Wages***	2020 CALIFORNIA Employment Growth Projection	CALIFORNIA Average Annual Job Openings****	2020 VENTURA COUNTY Employment Growth Projection	VENTURA COUNTY Average Annual Job Replacement Openings	VENTURA COUNTY Average Annual Job Openings****	2010 CALIFORNIA Average Annual Employment	2010 VENTURA COUNTY Average Annual Employment
17-3023		Electrical and Electronics Engineering Technicians	Associate's Degree	\$61,504	8.3	570	-1.2	16	16	20,400	810
17-3025		Environmental Engineering Technicians	Associate's Degree	\$61,522	18.5	100	30.8	2	6	2,700	130
17-3022		Civil Engineering Technicians	Associate's Degree	\$61,693	8.5	200	7.1	3	5	7,100	140
17-3029		Engineering Technicians, Except Drafters, All Other	Associate's Degree	\$64,283	9.7	270	0.0	7	7	9,300	350
11-9021		Construction Managers	Associate's Degree	\$102,300	14.1	1,220	15.0	6	22	59,600	1,000
45-2011		Agricultural Inspectors	Bachelor's Degree	\$45,509	4.3	80	N/A	N/A	N/A	2,300	N/A
27-1021		Commercial and Industrial Designers	Bachelor's Degree	\$63,105	22.5	210	26.7	5	9	4,000	150
13-2099		Financial Specialists, All Other	Bachelor's Degree	\$63,406	13.2	810	30.1	22	54	23,500	1,030
27-3031		Public Relations Specialists	Bachelor's Degree	\$63,441	21.1	1,130	14.7	9	14	23,700	340
13-1151		Training and Development Specialists	Bachelor's Degree	\$64,471	31.9	910	32.5	7	20	18,800	400
19-1013		Soil and Plant Scientists	Bachelor's Degree	\$69,582	26.3	120	N/A	N/A	N/A	1,900	N/A
41-3031		Securities, Commodities, and Financial Services Sales Agents	Bachelor's Degree	\$71,314	17.4	1,710	38.0	20	46	38,000	710
19-2041		Environmental Scientists and Specialists, Including Health	Bachelor's Degree	\$74,978	23.1	680	22.5	12	21	13,000	400
17-1012		Landscape Architects	Bachelor's Degree	\$76,000	12.5	110	N/A	N/A	N/A	3,200	N/A
19-2031		Chemists	Bachelor's Degree	\$76,659	11.0	480	0.0	8	8	10,900	250
13-1081		Logisticians	Bachelor's Degree	\$78,861	33.8	720	11.5	12	19	13,600	610
29-9011		Occupational Health and Safety Specialists	Bachelor's Degree	\$80,890	14.3	310	7.7	5	6	6,300	130
13-1111		Management Analysts	Bachelor's Degree	\$84,448	22.5	3,220	16.0	28	55	82,800	1,690
17-1022		Surveyors	Bachelor's Degree	\$85,245	15.7	190	20.0	2	4	5,100	100
17-2081		Environmental Engineers	Bachelor's Degree	\$86,165	25.0	280	20.0	4	8	6,000	200
19-2042		Geoscientists, Except Hydrologists and Geographers	Bachelor's Degree	\$87,326	25.5	260	25.0	4	8	4,700	120
13-2051		Financial Analysts	Bachelor's Degree	\$88,146	24.3	1,370	28.3	10	22	30,000	460
17-2141		Mechanical Engineers	Bachelor's Degree	\$90,973	9.8	940	6.4	25	30	22,500	780
17-2112		Industrial Engineers	Bachelor's Degree	\$92,771	11.1	630	3.1	7	8	19,000	320

Ventura County Occupational Employment Data Growth Projections CLEAN/GREEN (Infrastructure Subcommittee)

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19-2032		Materials Scientists	Bachelor's Degree	\$92,999	15.4	60	N/A	N/A	N/A	1,300	N/A
17-2051		Civil Engineers	Bachelor's Degree	\$93,988	12.6	1,230	20.4	11	22	37,200	540
11-3051		Industrial Production Managers	Bachelor's Degree	\$94,671	10.1	590	11.8	16	23	17,800	680
17-2131		Materials Engineers	Bachelor's Degree	\$98,576	17.2	140	N/A	N/A	N/A	2,900	N/A
17-2071		Electrical Engineers	Bachelor's Degree	\$102,201	10.5	740	1.9	13	15	21,000	530
17-2072		Electronics Engineers, Except Computer	Bachelor's Degree	\$106,211	12.9	1,170	-7.8	37	37	31,800	1,530
11-3131		Training and Development Managers	Bachelor's Degree	\$107,568	18.5	110	16.7	1	2	2,700	60
17-2011		Aerospace Engineers	Bachelor's Degree	\$112,911	13.3	720	0.0	2	2	20,300	100
11-3031		Financial Managers	Bachelor's Degree	\$121,491	13.5	2,210	18.7	25	51	69,600	1,390
11-2021		Marketing Managers	Bachelor's Degree	\$135,742	18.6	1,540	16.2	11	17	32,200	370
11-9121		Natural Sciences Managers	Bachelor's Degree	\$143,098	17.0	680	7.0	26	29	8,800	430
11-9041		Architectural and Engineering Managers	Bachelor's Degree	\$144,681	13.9	1,010	9.6	10	15	30,200	520
19-3051		Urban and Regional Planners	Master's Degree	\$78,710	23.6	450	13.3	16	6	8,900	150
25-1032		Engineering Teachers, Postsecondary	Doctoral Degree	\$109,773	12.9	90	N/A	N/A	N/A	3,100	N/A

*2010 Standard Occupational Classifications and Occupational Information Network provided by the Department of Labor

**Occupational training and education classifications were developed by the Bureau of Labor Statistics (BLS).

***Median Annual Wages are the estimated 50th percentile of the distribution of wages; 50 percent of workers in an occupation earn wages below, and 50 percent earn wages above the median wage. The wages are from 2010-1st quarter and do not include self-employed or unpaid family workers.

****Average Annual Job Openings includes new jobs and replacement needs.

Data Source: State of California Employment Development Department - Labor Market Info

Ventura County Occupational Employment Data Growth Projections

CLEAN/GREEN (Infrastructure Subcommittee)

	U.S. D.O.L. Green Jobs in Demand		2013 Education and Training Level**	2010 VENTURA COUNTY Median Annual Wages***	2020 CALIFORNIA Employment Growth Projection	CALIFORNIA Average Annual Job Openings****	2020 VENTURA COUNTY Employment Growth Projection	VENTURA COUNTY Average Annual Job Replacement Openings	VENTURA COUNTY Average Annual Job Openings****	2010 CALIFORNIA Average Annual Employment	2010 VENTURA COUNTY Average Annual Employment
SOC Code*		Occupations									











Additional Information:

Living Wage in Ventura County as of December 2013 (California Budget Project)	
\$34,109.00	Single Adult
\$79,549.00	Single-Parent Family*
\$64,203.00	Two-Parent Family* (one working)
\$85,713.00	Two-Working-Parent Family*












*All family types are assumed to have two children.

Current Employment Data
2020 Growth Projection Data
Priority Occupations Identified by Living Wages & Employment Growth
WIA Placement and Training Data










Ventura County Occupational Employment Data Growth Projections CLEAN/GREEN

SOC Code*	U.S. D.O.L. Green Jobs in Demand	Occupations	2013 Education and Training Level**	2010 VENTURA COUNTY Median Annual Wages***	2020 CALIFORNIA Employment Growth Projection	CALIFORNIA Average Annual Job Openings****	2020 VENTURA COUNTY Employment Growth Projection	VENTURA COUNTY Average Annual Job Replacement Openings	VENTURA COUNTY Average Annual Job Openings****	2010 CALIFORNIA Average Annual Employment	2010 VENTURA COUNTY Average Annual Employment
53-7064		Packers and Packagers, Hand	Less Than H.S.	\$19,720	15.7	4,140	14.8	54	82	93,500	1,890
51-9198		Helpers--Production Workers	Less Than H.S.	\$21,855	7.9	970	14.3	12	22	39,400	700
45-2091		Agricultural Equipment Operators	Less Than H.S.	\$22,250	2.1	470	32.1	26	53	14,000	840
45-2000		Agricultural Workers	Less Than H.S.	\$24,000	1.7	9,460	21.5	504	864	297,300	16,740
47-3019		Helpers, Construction Trades, All Other	Less Than H.S.	\$24,130	23.8	110	32.5	10	23	2,100	400
53-7062		Laborers and Freight, Stock, and Material Movers, Hand	Less Than H.S.	\$24,943	19.7	12,030	19.5	108	174	232,700	3,380
37-3011		Landscaping and Groundskeeping Workers	Less Than H.S.	\$25,024	21.6	5,440	15.8	77	146	138,500	4,370
47-3014		Helpers--Painters, Paperhangers, Plasterers, and Stucco Masons	Less Than H.S.	\$25,926	23.1	120	N/A	N/A	N/A	2,600	N/A
47-3016		Helpers--Roofers	Less Than H.S.	\$29,219	-7.7	30	N/A	N/A	N/A	1,300	N/A
47-3011		Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	Less Than H.S.	\$30,164	45.7	260	N/A	N/A	N/A	3,500	N/A
47-3012		Helpers--Carpenters	Less Than H.S.	\$30,908	51.6	240	N/A	N/A	N/A	3,100	N/A
53-7051		Industrial Truck and Tractor Operators	Less Than H.S.	\$33,995	15.2	2,570	19.6	40	68	59,100	1,430
47-2061		Construction Laborers	Less Than H.S.	\$38,491	19.5	3,020	24.3	17	69	109,500	2,140
53-7081		Refuse and Recyclable Material Collectors	Less Than H.S.	\$42,486	21.7	780	N/A	N/A	N/A	15,200	N/A
47-2181		Roofers	Less Than H.S.	\$48,253	3.0	400	13.9	7	12	16,800	360
45-4011		Forest and Conservation Workers	H.S. Diploma + OJT	\$21,072	0.0	90	0.0	3	3	3,600	130
49-9098		Helpers--Installation, Maintenance, and Repair Workers	H.S. Diploma + OJT	\$24,772	16.9	820	17.4	10	14	13,000	230
51-2092		Team Assemblers	H.S. Diploma + OJT	\$25,210	8.8	2,180	7.7	41	58	76,400	2,070
51-2099		Assemblers and Fabricators	H.S. Diploma + OJT	\$27,555	11.2	740	12.4	21	33	24,200	1,050
51-2023		Electromechanical Equipment Assemblers	H.S. Diploma + OJT	\$28,493	13.3	170	0.0	2	3	6,000	130








Ventura County Occupational Employment Data Growth Projections CLEAN/GREEN

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51-9032		Cutting and Slicing Machine Setters, Operators, and Tenders	H.S. Diploma + OJT	\$29,329	-2.0	110	8.3	3	4	5,100	120
43-5071		Shipping, Receiving, and Traffic Clerks	H.S. Diploma + OJT	\$29,778	5.6	2,790	4.3	53	62	89,900	2,070
51-2022		Electrical and Electronic Equipment Assemblers	H.S. Diploma + OJT	\$29,870	12.2	580	-3.6	20	20	22,200	1,370
47-3015		Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	H.S. Diploma + OJT	\$31,266	36.4	210	N/A	N/A	N/A	3,300	N/A
47-3013		Helpers--Electricians	H.S. Diploma + OJT	\$31,452	21.4	190	27.8	5	10	4,200	180
51-2031		Engine and Other Machine Assemblers	H.S. Diploma + OJT	\$33,638	14.3	50	0.0	1	2	1,400	60
51-9061		Inspectors, Testers, Sorters, Samplers, and Weighers	H.S. Diploma + OJT	\$36,100	13.4	1,690	7.8	33	45	47,900	1,540
43-4051		Customer Service Representatives	H.S. Diploma + OJT	\$36,347	18.6	9,260	22.1	122	217	197,300	4,300
51-4011		Computer-Controlled Machine Tool Operators, Metal and Plastic	H.S. Diploma + OJT	\$36,514	21.1	390	16.7	3	7	9,500	180
51-4121		Welders, Cutters, Solderers, and Brazers	H.S. Diploma + OJT	\$37,621	11.1	820	20.4	13	23	21,700	490
49-9071		Maintenance and Repair Workers, General	H.S. Diploma + OJT	\$38,449	12.7	3,510	11.2	36	58	113,000	1,960
53-6099		Transportation Workers, All Other	H.S. Diploma + OJT	\$40,194	16.0	230	18.2	7	11	5,000	220
51-4041		Machinists	H.S. Diploma + OJT	\$40,242	13.1	950	10.0	15	23	30,500	800
47-4041		Hazardous Materials Removal Workers	H.S. Diploma + OJT	\$40,284	18.6	190	0.0	2	3	4,300	60
49-9043		Maintenance Workers, Machinery	H.S. Diploma + OJT	\$40,578	4.9	140	12.5	3	5	6,100	160
53-3021		Bus Drivers, Transit and Intercity	H.S. Diploma + OJT	\$41,747	14.3	890	6.3	9	11	26,600	480
51-9011		Chemical Equipment Operators and Tenders	H.S. Diploma + OJT	\$44,949	8.0	60	N/A	N/A	N/A	2,500	N/A
43-5061		Production, Planning, and Expediting Clerks	H.S. Diploma + OJT	\$48,503	9.6	1,390	4.5	17	21	38,600	660
13-1022		Wholesale and Retail Buyers, Farm Products	H.S. Diploma + OJT	\$51,604	17.0	680	18.5	7	13	15,900	270
47-2152		Plumbers, Pipefitters, and Steamfitters	H.S. Diploma + OJT	\$53,543	17.2	1,670	26.7	17	33	36,100	600








Ventura County Occupational Employment Data Growth Projections CLEAN/GREEN

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47-2111		Electricians	H.S. Diploma + OJT	\$60,216	15.7	2,010	22.1	18	33	47,200	680
51-8021		Stationary Engineers and Boiler Operators	H.S. Diploma + OJT	\$64,384	5.9	100	0.0	1	1	3,400	60
47-2073		Operating Engineers and Other Construction Equipment Operators	H.S. Diploma + OJT	\$65,711	23.1	1,020	28.1	13	29	22,100	570
13-1199		Business Operations Specialists, All Other	H.S. Diploma + OJT	\$67,213	13.6	4,560	14.6	60	106	139,100	3,150
47-4011		Construction and Building Inspectors	H.S. Diploma + OJT	\$72,234	18.6	470	13.6	6	9	9,700	220
47-1011		First-Line Supervisors of Construction Trades and Extraction Workers	H.S. Diploma + OJT	\$73,957	21.7	2,060	26.4	1	43	46,000	870
11-3071		Transportation, Storage, and Distribution Managers	H.S. Diploma + OJT	\$84,677	14.0	460	14.3	5	9	12,100	210
51-8013		Power Plant Operators	H.S. Diploma + OJT	\$84,797	12.1	160	0.0	2	2	3,300	50
11-9199		Managers, All Other	H.S. Diploma + OJT	\$119,786	11.7	2,980	14.0	52	84	87,900	2,360
49-2092		Electric Motor, Power Tool, and Related Repairers	Vocational / OJT	\$41,903	7.7	20	N/A	N/A	N/A	1,300	N/A
49-9021		Heating, Air Conditioning, and Refrigeration Mechanics and Installers	Vocational / OJT	\$51,356	27.1	920	27.5	9	23	20,700	510
49-2094		Electrical and Electronics Repairers, Commercial and Industrial Equipment	Vocational / OJT	\$59,680	10.6	230	0.0	3	3	6,600	140
49-2095		Electrical and Electronics Repairers, Powerhouse, Substation, and Relay	Vocational / OJT	\$83,825	25.0	60	N/A	N/A	N/A	1,200	N/A
19-4011		Agricultural and Food Science Technicians	Associate's Degree	\$31,656	6.7	130	12.5	3	4	3,000	80
19-4093		Forest and Conservation Technicians	Associate's Degree	\$36,126	-2.7	310	-7.1	6	6	7,400	140
19-4031		Chemical Technicians	Associate's Degree	\$44,018	14.5	180	N/A	N/A	N/A	6,200	N/A
19-4091		Environmental Science and Protection Technicians, Including Health	Associate's Degree	\$50,108	26.5	230	37.5	3	6	3,400	80
17-3026		Industrial Engineering Technicians	Associate's Degree	\$51,790	15.6	160	N/A	N/A	N/A	4,500	
17-3024		Electro-Mechanical Technicians	Associate's Degree	\$52,618	13.9	120	N/A	N/A	N/A	3,600	

Ventura County Occupational Employment Data Growth Projections CLEAN/GREEN

SOC Code*	U.S. D.O.L. Green Jobs in Demand	Occupations	2013 Education and Training Level**	2010 VENTURA COUNTY Median Annual Wages***	2020 CALIFORNIA Employment Growth Projection	CALIFORNIA Average Annual Job Openings****	2020 VENTURA COUNTY Employment Growth Projection	VENTURA COUNTY Average Annual Job Replacement Openings	VENTURA COUNTY Average Annual Job Openings****	2010 CALIFORNIA Average Annual Employment	2010 VENTURA COUNTY Average Annual Employment
17-3011		Architectural and Civil Drafters	Associate's Degree	\$54,227	-0.8	250	0.0	3	3	12,700	170
17-3013		Mechanical Drafters	Associate's Degree	\$54,580	10.4	140	13.3	3	5	4,800	150
17-3012		Electrical and Electronics Drafters	Associate's Degree	\$55,771	10.0	120	0.0	2	3	4,000	120
17-3027		Mechanical Engineering Technicians	Associate's Degree	\$56,163	10.0	110	6.7	3	4	4,000	150
17-3023		Electrical and Electronics Engineering Technicians	Associate's Degree	\$61,504	8.3	570	-1.2	16	16	20,400	810
17-3025		Environmental Engineering Technicians	Associate's Degree	\$61,522	18.5	100	30.8	2	6	2,700	130
17-3022		Civil Engineering Technicians	Associate's Degree	\$61,693	8.5	200	7.1	3	5	7,100	140
17-3029		Engineering Technicians, Except Drafters, All Other	Associate's Degree	\$64,283	9.7	270	0.0	7	7	9,300	350
11-9021		Construction Managers	Associate's Degree	\$102,300	14.1	1,220	15.0	6	22	59,600	1,000
45-2011		Agricultural Inspectors	Bachelor's Degree	\$45,509	4.3	80	N/A	N/A	N/A	2,300	N/A
27-1021		Commercial and Industrial Designers	Bachelor's Degree	\$63,105	22.5	210	26.7	5	9	4,000	150
13-2099		Financial Specialists, All Other	Bachelor's Degree	\$63,406	13.2	810	30.1	22	54	23,500	1,030
27-3031		Public Relations Specialists	Bachelor's Degree	\$63,441	21.1	1,130	14.7	9	14	23,700	340
13-1151		Training and Development Specialists	Bachelor's Degree	\$64,471	31.9	910	32.5	7	20	18,800	400
19-1013		Soil and Plant Scientists	Bachelor's Degree	\$69,582	26.3	120	N/A	N/A	N/A	1,900	N/A
41-3031		Securities, Commodities, and Financial Services Sales Agents	Bachelor's Degree	\$71,314	17.4	1,710	38.0	20	46	38,000	710
19-2041		Environmental Scientists and Specialists, Including Health	Bachelor's Degree	\$74,978	23.1	680	22.5	12	21	13,000	400
17-1012		Landscape Architects	Bachelor's Degree	\$76,000	12.5	110	N/A	N/A	N/A	3,200	N/A
19-2031		Chemists	Bachelor's Degree	\$76,659	11.0	480	0.0	8	8	10,900	250
13-1081		Logisticians	Bachelor's Degree	\$78,861	33.8	720	11.5	12	19	13,600	610
29-9011		Occupational Health and Safety Specialists	Bachelor's Degree	\$80,890	14.3	310	7.7	5	6	6,300	130
13-1111		Management Analysts	Bachelor's Degree	\$84,448	22.5	3,220	16.0	28	55	82,800	1,690
17-1022		Surveyors	Bachelor's Degree	\$85,245	15.7	190	20.0	2	4	5,100	100

Ventura County Occupational Employment Data Growth Projections CLEAN/GREEN

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17-2081		Environmental Engineers	Bachelor's Degree	\$86,165	25.0	280	20.0	4	8	6,000	200
19-2042		Geoscientists, Except Hydrologists and Geographers	Bachelor's Degree	\$87,326	25.5	260	25.0	4	8	4,700	120
13-2051		Financial Analysts	Bachelor's Degree	\$88,146	24.3	1,370	28.3	10	22	30,000	460
17-2141		Mechanical Engineers	Bachelor's Degree	\$90,973	9.8	940	6.4	25	30	22,500	780
17-2112		Industrial Engineers	Bachelor's Degree	\$92,771	11.1	630	3.1	7	8	19,000	320
19-2032		Materials Scientists	Bachelor's Degree	\$92,999	15.4	60	N/A	N/A	N/A	1,300	N/A
17-2051		Civil Engineers	Bachelor's Degree	\$93,988	12.6	1,230	20.4	11	22	37,200	540
11-3051		Industrial Production Managers	Bachelor's Degree	\$94,671	10.1	590	11.8	16	23	17,800	680
17-2131		Materials Engineers	Bachelor's Degree	\$98,576	17.2	140	N/A	N/A	N/A	2,900	N/A
17-2071		Electrical Engineers	Bachelor's Degree	\$102,201	10.5	740	1.9	13	15	21,000	530
17-2072		Electronics Engineers, Except Computer	Bachelor's Degree	\$106,211	12.9	1,170	-7.8	37	37	31,800	1,530
11-3131		Training and Development Managers	Bachelor's Degree	\$107,568	18.5	110	16.7	1	2	2,700	60
17-2011		Aerospace Engineers	Bachelor's Degree	\$112,911	13.3	720	0.0	2	2	20,300	100
11-3031		Financial Managers	Bachelor's Degree	\$121,491	13.5	2,210	18.7	25	51	69,600	1,390
11-2021		Marketing Managers	Bachelor's Degree	\$135,742	18.6	1,540	16.2	11	17	32,200	370
11-9121		Natural Sciences Managers	Bachelor's Degree	\$143,098	17.0	680	7.0	26	29	8,800	430
11-9041		Architectural and Engineering Managers	Bachelor's Degree	\$144,681	13.9	1,010	9.6	10	15	30,200	520
19-3051		Urban and Regional Planners	Master's Degree	\$78,710	23.6	450	13.3	16	6	8,900	150
25-1032		Engineering Teachers, Postsecondary	Doctoral Degree	\$109,773	12.9	90	N/A	N/A	N/A	3,100	N/A

*2010 Standard Occupational Classifications and Occupational Information Network provided by the Department of Labor

**Occupational training and education classifications were developed by the Bureau of Labor Statistics (BLS).

***Median Annual Wages are the estimated 50th percentile of the distribution of wages; 50 percent of workers in an occupation earn wages below, and 50 percent earn wages above the median wage. The wages are from 2010-1st quarter and do not include self-employed or unpaid family workers.

****Average Annual Job Openings includes new jobs and replacement needs.

Ventura County Occupational Employment Data Growth Projections
CLEAN/GREEN

	U.S. D.O.L. Green Jobs in Demand		2013 Education and Training Level**	2010 VENTURA COUNTY Median Annual Wages***	2020 CALIFORNIA Employment Growth Projection	CALIFORNIA Average Annual Job Openings****	2020 VENTURA COUNTY Employment Growth Projection	VENTURA COUNTY Average Annual Job Replacement Openings	VENTURA COUNTY Average Annual Job Openings****	2010 CALIFORNIA Average Annual Employment	2010 VENTURA COUNTY Average Annual Employment
SOC Code*		Occupations									

Data Source: State of California Employment Development Department - Labor Market Info

Additional Information:

Living Wage in Ventura County as of December 2013 (California Budget Project)	
\$34,109.00	Single Adult
\$79,549.00	Single-Parent Family*
\$64,203.00	Two-Parent Family* (one working)
\$85,713.00	Two-Working-Parent Family*

*All family types are assumed to have two children.

Current Employment Data
2020 Growth Projection Data
Priority Occupations Identified by Living Wages & Employment Growth
WIA Placement and Training Data

The hospitality industry—a partner with much to offer

If you want to be a professional in a career with a rewarding, high-growth environment allowing multiple career paths, the hotel & hospitality industry has the ability to fill your need. Within the hotel industry, you can obtain consistent increase in skills and experience as one of the largest and fastest-growing industries in the world.

Ventura County Hotel & Hospitality Skills & beliefs for professionals

Soft Skills:

- Initiative
- Work ethic
- Basics of interviewing
- Communication Skills
- Continuous improvement skills
- Basic company policy understanding
- Time management
- Task prioritization
- Hospitality & Lodging development & planning
- Worker, supervisor, manager etiquette and protocol basics
- Opportunities for work experience—applications of skills in work settings
- Apprenticeships—knowledge of career pathways and paid training opportunities
- General math skills
- General reading skills

Basics of Quality Control:

- Know processes, as applicable per job function
- Basic quality methodology of each job function
- Importance of individual responsibility—do it right the first time
- Hotel & Hospitality theory and quality control
- Knowledge of system processes
- Knowledge of 'clean-green' processes
- Cost Control/ Purchasing

Computer Skills:

- Microsoft Word
- Microsoft Excel
- Operating system basics
- Computer navigation
- Computer etiquette
- Computer security

Lodging skills:

- Safety & Security
- Hotel Facilities & Management
- HR/Law skills
- Food Management/ Catering
- Accounting
- Guest Service/ Guest cycle
- Front desk operations
- Reservations/registration/check out & settlement
- Housekeeping Management

Food & Beverage Service

Sales & Marketing:

- Hospitality Sales Marketing/ Social Media Marketing/ Telephone Sales
- Catering & Meeting Room Sales
- Advertising & Public Relations

- Hotels/Food Beverage Service
- Menu/ Dining & Beverage Service
- Event Planning/ Bridal Event Planning
- Sanitation, Health & Safety

Hospitality relates to:

Accommodations—Hotels, motels, resorts, hostels, vacation rentals, vacation ownership, Bed & Breakfast properties, recreational vehicles, camping

Food & Beverage—Restaurants, full-service, fine dining, quick service, banquet facilities, lounges

Transportation—Airlines, cruise lines, rail, car rentals, tour/coach operators, bus lines, taxis

Attractions—Theme parks, zoos, national/state/local parks, natural wonders, heritage sites.

Tourism /Destination – Convention Visitors Bureaus, State Travel Groups, Chambers of Commerce.