

Date of Hearing: June 23, 2015

ASSEMBLY COMMITTEE ON JOBS, ECONOMIC DEVELOPMENT, AND THE ECONOMY

Eduardo Garcia, Chair

SB 189 (Hueso) – As Amended June 1, 2015

**SENATE VOTE:** 26-14

**SUBJECT:** Clean Energy and Low-Carbon Economic and Jobs Growth Blue Ribbon Committee.

**SUMMARY:** Establishes the Clean Energy and Low-Carbon Economic and Jobs Growth Blue Ribbon Committee (Clean Energy Committee) for the purpose of advising state agencies on the most effective ways to maximize California's economic benefits and jobs growth via actions and investments in a cleaner, low-carbon economy. Specifically, **this bill:**

- 1) Finds and declares that:
  - a) Numerous analyses have shown that California is a world leader in clean energy and greenhouse gas emission (GHG) reduction law and policy which has led to major employment and economic benefit to the state, as well as providing significant environmental and public health benefits. One report is cited as stating 430,000 jobs have been created as a result of California's advanced energy policies and that California ranks first in the nation for installed solar capacity, the number of solar jobs, the total amount of advanced energy investments, and electric car sales.
  - b) The State Air Resources Board, the State Energy Resources Conservation and Development Commission, and the Public Utilities Commission have all created advisory committees to help them better understand the implications of their clean energy and climate policies and to ensure that the state's clean energy and climate programs are optimized for maximum economic benefit and job creation.
  - c) The purpose of this legislation is to create a single independent blue ribbon committee to provide advice to these and other agencies on the most effective ways to maximize California's economic benefits and jobs growth via actions and investments in a cleaner, low-carbon economy.
- 2) Establishes the seven-member Clean Energy Committee under the auspicious of California Environmental Protection Agency (CalEPA). Five of the members are to be appointed by the Governor (subject to confirmation by the Senate) and the Speaker of the Assembly and the Senate Committee on Rules each appoint one member.
- 3) Specifies that each Clean Energy Committee member serves a term of four years.
- 4) Prohibits committee members from receiving per diem or other compensation for their service. Members are, however, authorized to receive reimbursement for actual expenses incurred in connection with the performance of their duties.
- 5) Requires that the Clean Energy Committee members have expertise in economic, financial, and policy aspects of clean energy economic growth, job creation, workforce standards, and employment opportunities for disadvantaged workers. At least two members of the committee are required to have experience working on economic projects in disadvantaged communities.
- 6) Requires the Clean Energy Committee to advise state agencies on the most effective ways to expend clean energy and GHG-related funds and to implement policies that maximize California's economic

and employment benefits. In undertaking its duties, the bill requires the Clean Energy Committee to do all the following:

- a) Develop guidance for tracking and reporting jobs outcomes for state clean energy and low-carbon investments and use this information to evaluate jobs outcomes.
  - b) Develop guidance, in consultation with the Labor and Workforce Development Agency, to measure the quantity and quality of jobs created by state investments in clean energy and low-carbon investments, as well as guidance to measure the geographic and demographic distribution of jobs.
  - c) Advise state agencies on the most effective ways to require responsible contractor standards, as applicable, and minimum training and skill certifications for workers to ensure high-quality work for state clean energy and low-carbon investments, and the most effective ways to connect disadvantaged communities and other target populations to good quality jobs and career pathways created by those investments.
  - d) Advise state agencies, in consultation with the California Workforce Investment Board (CWIB), on the most effective ways to align state clean energy and low-carbon training funds with existing state workforce development investments and strategies.
- 7) Requires the Clean Energy Committee to provide an annual update to the Governor and the appropriate policy and fiscal committees of the Legislature on its activities.
  - 8) Requires the State Energy Resources Conservation and Development Commission, the Public Utilities Commission, the State Air Resources Board, and any other state agency responsible for implementing clean energy and low-carbon policies and programs to submit an annual progress report to the Governor and the appropriate policy and fiscal committees of the Legislature describing how it implemented or responded to the advice, guidance, and any recommendations provided by the Clean Energy Committee.
  - 9) Authorizes a state agency to include the reporting requirements of this bill within any other annual report the state agency, as specified.
  - 10) Sunsets the provision of this bill on January 1, 2021.

**EXISTING LAW:**

- 1) Enacts the California Global Warming Solutions Act, which requires the California Air Resources Board (ARB) to determine the 1990 statewide GHG emissions level and approve a statewide GHG emissions limit that is equivalent to that level, to be achieved by 2020, and to adopt GHG emission reduction measures by regulation, and sets certain requirements in adopting the regulations.
- 2) Establishes the Green Collar Jobs Council (GCJC) within the CWIB, for the purpose of consulting with other state agencies, among others, on developing the funding, strategies, programs, policies, partnerships, and opportunities necessary to address the growing need for a highly skilled and well-trained workforce to meet the needs of California's emerging green economy. To the extent private funds are available, it is the intent of the Legislature that the GCJC develop an annual award for outstanding achievement for workforce training programs. The GCJC is comprised of the appropriate representatives from the CWIB existing membership.

- 3) Requires the ARB to convene an Environmental Justice Advisory Committee (EJAC), to advise the ARB in developing the Scoping Plan, and any other pertinent matter in implementing the Act. Requires that the EJAC be comprised of representatives from communities in the State with the most significant exposure to air pollution, including, but not limited to, communities with minority populations or low-income populations.
- 4) Requires the ARB to appoint an Economic and Technology Advancement Advisory Committee (ETAAC) to advise the ARB on activities that will facilitate investment in and implementation of technological research and development opportunities, including, but not limited to, identifying new technologies, research, demonstration projects, funding opportunities, developing state, national, and international partnerships and technology transfer opportunities, and identifying and assessing research and advanced technology investment and incentive opportunities that will assist in the reduction of greenhouse gas emissions. Provides that the ETAAC may also advise the ARB on state, regional, national, and international economic and technological developments related to greenhouse gas emission reductions.
- 5) Establishes the State Agency GHG Reduction Report Card (Report Card), which requires among other things, that on or before October 1 of each year, each state agency prepare and submit to the CalEPA Secretary:
  - a) A list of measures that have been adopted and implemented to meet GHG emission reduction targets and a status report on actual GHG emissions reduced as a result of these measures.
  - b) A list and timetable for adoption of any additional measures needed to meet GHG emission reduction targets.
  - c) An estimate of the department's own greenhouse gas emissions, as well as an explanation of any increase or decrease compared to the previous year's emissions.
- 6) Requires CalEPA to compile and organize the information submitted by the state agencies into a format representative of a Report Card. In addition, the Report Card is required to include a comparison of the actions taken/proposed to be taken by individual state agencies and their projected annual GHG emission reductions against the state agency GHG emission reduction targets and statewide GHG emission reduction limits.
- 7) Requires CalEPA to submit to the Legislature a comprehensive budget display on or before January 10 of each year, that identifies funding proposals and base funding in the proposed Governor's Budget that are intended to help the state reach its greenhouse gas emissions reduction targets as specified in the California Global Warming Solutions Act of 2006, and a five-year work plan summary that shows how staff and contracting resources will be allocated to achieve specified climate solution deliverables.

**FISCAL EFFECT:** Unknown

**POLICY ISSUE FRAME:**

In 2008, the GCJC was established under the auspiciousness of the CWIB for the purposes of responding to the workforce and economic development needs of California's transition to a lower carbon economy. The Legislature and Governor understood that addressing rising GHG emissions would require the development of new and adaption of existing technologies and processes, as well as the termination, or at

least the reduction, of some business activities within the state. This, in turn, would require a differently skilled workforce and potentially spur new business opportunities and job creation.

Most recently, the GCJC has engaged on the deployment of Proposition 39 funds, supported a workforce plan for investor-owned utilities and energy efficiency, and discussed workforce and credentialing standards with the U.S. Department of Energy. In the past, the GCJC adopted a Green Workforce Master Plan and proposed job and workforce development program elements for the state's carbon reduction investments.

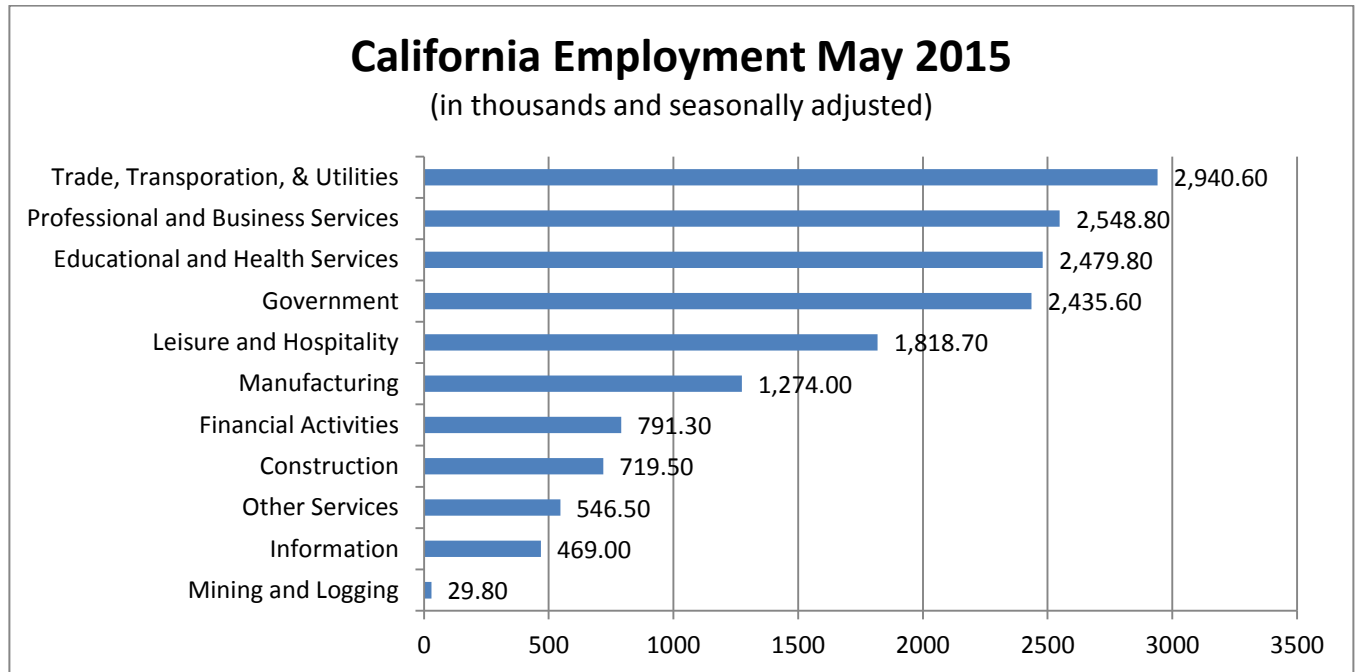
AB 189 proposes a more narrowly focused stakeholder advisory committee, which would be tasked with specifically looking at potential state expenditures and state policies that support economic growth and job creation in the clean energy field. The SB 189 stakeholder advisory committee will also have a unique set of expertise from the GCJC, which should assist the committee in developing recommendations that provide for a more inclusive workforce development system, especially for historically underserved groups of individuals and economic development efforts in disadvantaged communities.

In the comment section of the analysis is additional information on the California economy, unemployment, and economic opportunities within cleantech and energy-related industries. Suggestions for technical amendments are provided under Comment 4.

#### COMMENTS:

- 1) **Author's Purpose:** According to the author's statement, " As the Legislature and the Governor articulate next steps for our clean energy and climate policies, it is important to have a permanent and formal committee that can advise agencies implementing such policies on the best ways to maximize expenditure of public funds to ensure the state achieves the greatest economic growth and job creation. SB 189 would establish a high-level expert Blue Ribbon Committee to serve that role of advising state clean energy and climate actions to ensure maximum job creation and economic benefits to California."
- 2) **The California Workforce:** California is home to over 38 million people, providing the state with one of the most diverse populations in the world, often comprising the single largest concentration of nationals outside their native country. In 2014, this diverse group of business owners and workers produced \$2.3 trillion in goods and services; \$174.1 billion of which were exported to over 220 countries around the world. California's 2014 GDP ranks the state economy as the eighth largest in the world.

Many policy makers and economists describe California as having not a single economy, but having a highly integrated network of a dozen or so regional economies. While biotech has a comparative advantage in some regions, information technology drives growth in others. This economic diversity is one of the reasons California was able to so aggressively move out of the recession, ranking number two in the nation by *Business Insider* for fastest growing economy in the nation in August 2014 and as having the fourth best overall economy in March 2015. There are approximately 19 million people within the California workforce. Below is a chart of California employment by industry sector.



Another key economic driver in California is the agriculture sector, which includes a number of the industry sectors displayed above. One estimate, by researchers at Butte Community College, is that California's agriculture value chain contributes nearly \$300 billion annually to the economy and accounts for nearly 2.5 million jobs across 800 different job titles.

While many areas of the state have continued to experience economic growth, other regions continue to lag in terms of jobs and business activity. Increasingly, the state is becoming economically divided. As an example, in May 2015, the overall state unemployment rate was 6.2%. The lowest unemployment rate was reported for San Mateo (3.2%), followed by Marin (3.3%) and San Francisco (3.5%). In stark contrast to the Bay Area's economic vitality is Imperial County, which registered a 21.1% unemployment rate. In fact, 21 of California's 58 counties had rates below 6.0% and 34 counties had unemployment rates above the 6.2% state rate. A majority of the counties experiencing the higher unemployment rates were in the state's inland regions. In addition to regional differences, unemployment rates also differ by age, race, and ethnicity. For May 2015 the highest unemployment was reported to be among 16 to 19 year olds (22.3%), blacks (13.4%), and Hispanics (8%).

Given the significant financial and policy priority the state has placed on GHG emission reductions, it is important that related activities reflect the specific conditions and circumstances of all regions and populations. Transitioning to a lower carbon economy has economic costs, as well as opportunities, which the state has been slow to address. Part of the ultimate goal for California's less carbon intensive economy should be a more inclusive workforce and business development platform.

AB 189 addresses the need for greater economic justice in policy making by requiring at least two of the seven members of the Clean Energy Committee have expertise in working on economic projects in disadvantaged communities. Further, the overall membership is required to have experience in not just clean energy, but also job creation, workforce standards, and employment opportunities for disadvantaged workers.

- 3) **The Clean Energy Job Market:** California's clean energy and technology economy encompasses a broad range of products and services, touching upon multiple industry sectors. This includes clean

technology such as alternative energy generation, wastewater treatment, and the production of environmentally-friendly consumer products. Although some of these industries are very different, they all use innovative technologies, products, and services that have environmental benefits.

Growth in the cleantech industry largely comes from the convergence of two disparate factors. One, recent advances in new technologies, research methods, manufacturing, and communications that lower the cost of environmentally sensitive technologies; and two, an increasing number of consumers and businesses that are looking for ways to reduce energy costs, increase clean water supply, and meet new environmental regulatory requirements at the local, state, and global levels. Governments, in turn, have adopted new regulatory frameworks that require greater use of recyclable materials, increased the use of renewable energy, and lowered air pollution and GHG emissions.

Legislative findings in SB 189 state that numerous analyses have shown that California is a world leader in clean energy and GHG reduction law and policy, which has been a significant contributor to the California job market, providing economic, as well as environmental and public health benefits.

The chart below, developed by Cleantech San Diego, illustrates the wide range of industries engaged in the cleantech industry cluster.

<b>Chart 4: Examples of Cleantech Industries</b>	
<b>Agriculture</b>	Bio-based materials; farm efficiency technologies; micro-irrigation systems; bio-remediation; and non-toxic cleaners and natural pesticides.
<b>Air &amp; Environment</b>	Air purification products and air filtration systems; energy efficient HVAC; universal gas detectors; multi-pollutant controls; and fuel additives to increase efficiency and reduce toxic emissions.
<b>Materials</b>	Biodegradable materials derived from seed proteins; micro-fluidics technology for conducting biochemical reactions; nano-materials; composite materials; thermal regulating fibers and fabrics; environmentally-friendly solvents; nano-technology components for electronics, sensor applications and energy storage; electro-chromic glass; and thermoelectric materials.
<b>Energy</b>	<p><i>Energy Efficiency:</i> Energy management systems; systems that improve output of power generating plants; intelligent metering; solid state micro refrigeration; control technology for HVAC systems; and automated energy conservation networks.</p> <p><i>Energy Generation:</i> Distributed and renewable energy and conversion, including wind, solar/photovoltaic (PV), hydro/marine, biofuels, fuel cells, gasification technologies for biomass, and flywheel power systems.</p> <p><i>Energy Infrastructure:</i> Wireless networks to utilities for advanced metering; power quality monitoring and outage management; integrated electronic systems for the management of distributed power; and demand response and energy management software.</p> <p><i>Energy Storage:</i> Batteries, e.g. thin film and rechargeable; power quality regulation; flywheels; and electro-textiles.</p>
<b>Manufacturing and Industrial</b>	Advanced packaging; natural chemistry; sensors; smart construction materials; business process and data flow mapping tools; precision manufacturing instruments & fault detectors; and chemical management services.
<b>Recycling &amp; Waste</b>	Recycling technologies; waste treatment; internet marketplace for materials; hazardous waste remediation; and bio-mimetic technology for advance metals separation and extraction.
<b>Transportation</b>	Hybrid vehicle technology; lighter materials for cars; smart logistics software; car-sharing; and temperature pressure sensors to improve transportation fuel efficiency; telecommuting.
<b>Water &amp; Wastewater</b>	Water recycling and ultra-filtration systems (e.g. UV membrane & ion exchange systems); sensors and automation systems; and water utility sub-metering technology; desalination equipment.
<b>Source:</b> Cleantech San Diego	

A December 2014 survey of 2,000 companies by the Advanced Energy Economy Institute found that state advanced energy policies have created over 430,000 jobs in 2014, which was an increase of 5% over the prior year. The survey also noted that significant comparative advantage California has over other areas, as demonstrated by the state having the most domestic installed solar capacity, solar jobs, total advanced energy investment, and electric vehicle sales. Another important finding was that 77% of the responding firms only had customers in California and only 3% had customers outside the U.S. Given California's geographic location and already demonstrated capability to successfully engage within global supply chains, export opportunities could be substantial for California's advanced energy industries.

- 4) **Proposed Amendments:** Below is a list of technical amendments that will assist in the implementation of the bill.
- a) Clarify that an individual committee member is required to have expertise in at least one of the specified areas, not all of the specified areas.
  - b) Set a date for the first meeting in order to establish a clear timeline for appointments.
  - c) Clarify that vacancies will be filled in the same manner as the initial appointments.
  - d) Clarify which of the three appointing authorities has the responsibility for appointing the individuals with experience in working with disadvantaged communities.
  - e) Add a definition of agency.
  - f) Clarify that only those agencies that received advice from the Clean Energy Committee are required to provide a progress report to the Governor and Legislature.

As the measure moves forward, the author may also want to consider ways to more concretely differentiate the SB 189 advisory committee from the work already being performed by the GCJC.

- 5) **Related Legislation:** This bill is part of the California State Senate's Climate Bill Package. Madame Speaker has also introduced a major GHG reduction bill. A selection of these bills are described below.
- a) **AB 1288 (Atkins) ARB Regulation Sunset:** This bill eliminates the December 31, 2020, limit on applicability of a market-based mechanism to reduce greenhouse gas (GHG) emissions that may be adopted by the Air Resources Board. Status: Pending in the Senate Committee on Environmental Quality.
  - b) **AB 1030 (Ridley-Thomas)** would requires a state agency that allocates moneys from the Greenhouse Gas Reduction Fund to prioritize projects that include project labor agreements with targeted hire goals, community workforce agreements that connect local residents to jobs or training opportunities, or partnerships with training entities that have a proven track record of placing disadvantaged workers in career-track jobs. Status: Pending in the Assembly Natural Resources Committee.
  - c) **SB 32 (Pavley) California Global Warming Solution Act of 2006: Emission Limit:** This bill sets the overarching climate pollution reduction target for 2050 that will provide California businesses with regulatory certainty, improve public health, and strengthen the economy. Status: Pending in Senate Natural Resources.

- d) ***SB 185 (De León) Divestment from Coal***: This bill prohibits the California Public Employees' Retirement System (CalPERS) and the California State Teachers' Retirement System (CalSTRS) boards from making new or additional investments of public employee retirement funds in thermal coal companies, as defined, and requires each board to liquidate its existing investments in thermal coal companies on or before July 1, 2017, provided that the boards make a good faith determination that thermal coal divestment is consistent with their fiduciary responsibility. The boards must first constructively engage with the affected companies to determine whether they are transitioning to clean energy generation and must report to the Legislature and Governor by January 1, 2018, on the boards' engagement and divestment activities. Status: Set to be heard on June 23 in the Assembly Committee on Public Employees, Retirement and Social Security.
- e) ***SB 350 (De León and Leno) Clean Energy and Pollution Reduction Act of 2015***: This bill enacts the Clean Energy and Pollution Reduction Act of 2015, which creates or expands three related clean-energy goals to be achieved by 2030: (1) a 50 percent reduction in petroleum used in motor vehicles; (2) a doubling of the energy efficiency of existing buildings; and (3) generating 50 percent of total retail sales of electricity from renewable resources. Status: Pending in the Assembly Utilities and Commerce Committee.
- 6) **Double Referral**: The Assembly Rules Committee has referred this measure the Assembly Committee on Jobs, Economic Development and the Economy and to the Assembly Committee on Natural Resources (NR). Should this measure pass the committee, it will be referred to NR for further policy consideration.

#### **REGISTERED SUPPORT / OPPOSITION:**

##### **Support**

Alliance for Solar Choice  
 American Lung Association  
 Audubon Society  
 Azul  
 Bloom Energy  
 California League of Conservation Voters  
 California State Association of Electrical Workers  
 Clean Transportation Technologies and Solutions  
 Environment California  
 Environmental Defense Fund  
 Natural Resources Defense Council  
 Sierra Club  
 Solar City  
 Solar Energy Industries Association  
 Sun-Run  
 Union of Concerned Scientists

##### **Opposition**

None received

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