

Comments of the San Diego Sustainable Energy Advisory Board

The Sustainable Energy Advisory Board for the City of San Diego is proud of the City of San Diego's effort to develop a comprehensive and enforceable climate action plan (CAP) and are pleased to have an opportunity to review it and to provide our comments.

Anthropogenic climate change is a significant threat and decisive action is needed to avoid ill effects. California has become a leader and a role model for climate action because of its proactive policies to reduce greenhouse gas (GHG) emissions.

San Diego's CAP is a set of strategies to be implemented by the city to support and complement actions at the state and federal level. The city's key strategies include: 1) Energy and Water Efficient Buildings, 2) Clean and Renewable Energy, 3) Bicycling, Walking, Transit & Land Use, 4) Zero Waste (Gas and Waste Management), and 5) Climate Resiliency. The specific action items with largest contribution to GHG reductions, and therefore the highest priorities, are as follows: 1) the proposed transition to 100% renewable energy on the city-wide electrical grid by 2035 using a Community Choice Aggregation Plan or similar program, 2) Increased use of mass transit by implementing the General Plan's Mobility Element and the City of Villages strategy, 3) Reduce Vehicle Miles Traveled through effective land use focused in Transit Priority Areas, 4) Diversion of solid waste and capture of landfill methane, and 5) Restoring Green Infrastructure by a robust urban forestry program.

We agree with the priority being placed on these strategies and key action items. We offer the following overarching comments:

1. In many cases, the action items in the plan simply state that a proposal will be presented to the City Council for consideration. Thus, it is not possible to evaluate what each specific action plan actually entails. The Sustainable Energy Advisory Board intends to support and offer assistance however needed. We would like to partner with city staff as the specific policies and ordinances are being developed. Further we note that there is—and will be—a need to vertically integrate the CAP into current City policy and the development of the Community Plans that are underway. The success of the CAP will result from appropriate prioritization and budgeting. We are encouraged that the City is investing in the implementation of the CAP in advance of the formal adoption by Council.
2. Many highly energy efficient products and technologies are already available and ready for deployment. The city should examine its regulatory and incentive programs to determine whether there are opportunities to encourage adoption and speed deployment of approaches and technologies that can support the greenhouse gas reduction goals of the CAP with the support of the private sector.
3. The state and federal regulatory environment is changing. CAP was developed in response to AB 32 and ARB's subsequent Scoping Plan, SB 1078, SB 107, SB 2, AB 758, several executive orders

and others. However, new rules have been published or are under consideration (EPA's Clean Energy Plan, published in August of 2015, SB 350, and SB 32 to name a few). There's a need to anticipate regulatory trends and to update CAP as needed to stay current. Much of the local action identified within the CAP includes partnering with other regional agencies—we encourage the City, in its partnership role, to be actively lobby for the success of the City of San Diego Climate Action Plan.

Additionally, we offer the following specific technical concerns:

4. Page 20, Figure 2.2-San Diego's plan has been developed to achieve the targets set in a number of regulatory actions including, but not limited to AB 32, California's Global Warming Solutions Act, Executive Order B-30-15, and Executive Order S-3-05. Targets are set using a baseline of 2010. However, it is now near the end of 2015. The graph (Figure 2.2) should be updated to show what San Diego's GHG's actually are now. It is not possible to judge whether the projections are realistic without knowing the current starting point, or which trajectory we are following. All projections should be re-evaluated using the actual current starting point for emissions.
5. Economic Development...need to add comments for this section
6. Social Equity and Job Creation needs significant development. On page 47, it states that the San Diego Workforce Partnership estimates that there were almost 340,000 green jobs in San Diego as of 2011. Since San Diego's total labor force is approximately 1.6 million, this would represent more than 20% of the total. However, on page 48 only a few job types are mentioned and they are described a "predominately middle class" and "pathways out of poverty." Climate action provides jobs at all levels. The section of CAP dealing with social equity and job creation should include a description of the full spectrum of opportunities.

The 2014 California Green Innovation Index (Next 10, 2014), indicates that the number of jobs in California's Core Clean Economy increased 20% between 2002 and 2012 compared to just 2% for the total state economy. Fastest growing segments were clean transportation at +111% and clean energy generation at +61%, both of which are key elements of the Climate Action Plan.

In this report (Next 10, 2014), 15 categories of "green jobs" are included. In order of size of the category, with the largest first, they are: 1) Air and the Environment, 2) Energy Generation, 3) Recycling and Waste, 4) Energy Infrastructure, 5) Energy Efficiency, 6) Water and Wastewater, 7) Green Building, 8) Clean Transportation, 9) Research and Advocacy, 10) Agricultural Support, 11) Energy Storage, 12) Advanced Materials, 13) Clean Industrial Support, 14) Business Services, and 15) Finance and Investment.

San Diego accounted for 14% of California's total "green jobs" between 2002 and 2012 and ranked third in the state, behind San Francisco (31%) and Los Angeles (21%). San Diego has the second highest concentration of jobs in Clean Transportation in California and is experiencing very high growth in Advanced Materials (Next 10, 2014).

According to the Bureau of Labor Statistics, "green jobs" are either:

- Jobs in businesses that produce goods or provide services that benefit the environment or conserve natural resources.
- Jobs in which workers' duties involve making their establishment's production processes more environmentally friendly or use fewer natural resources.

Jobs include research and development, manufacturing and distribution, installation and maintenance. Green goods and services fall in one or more of the following categories:

- Energy from renewable sources-electricity, heat, or fuel generated from wind, biomass, solar, ocean, hydropower, biomass, landfill gas and municipal solid waste.
- Products and services that improve energy efficiency such as energy efficient equipment, appliances, buildings and vehicles as well as products and services that improve the energy efficiency of buildings and efficiency of energy storage and distribution such as smart grid technologies. Cogeneration is included in this category.
- Products that reduce or eliminate the creation or release of pollutants or toxic compounds, remove pollutants or hazardous waste from the environment; reduce greenhouse gas emissions; reduce or eliminate creation of waste materials, collect, reuse, remanufacture, recycle or compost waste materials or wastewater.
- Natural resource conservation, including products and services related to organic agriculture and sustainable forestry, land management, soil water or wildlife conservation, and stormwater management.
- Environmental compliance, education and training and public awareness-products and services that enforce environmental regulations, provide education and training related to green technologies and practices or increase public awareness of environmental issues.

The Climate Action Plan establishes the requirements for future policy in regard to greenhouse gas emissions targets. Additionally, we request the Climate Action Plan to clearly identify the methods used to calculate green jobs and include numeric targets for these jobs and economic development over the life of the plan. Monitoring and enforcement of the economic development actual-to-potential should be included in regular updates to staff management, City Council, the Mayor, and the community.

7. Adaptation to effects of climate change that can no longer be avoided.

- Urban tree planting program is the only specific tactic mentioned in CAP. The need to develop an adequate climate adaptation plan is acknowledged. We understand that few adaptation measures have quantifiable reductions in greenhouse gas emissions. The CAP is focused on identifying the numeric targets related to federal, state, and regional/local policy to reduce greenhouse gas emissions. However, the need for a detailed adaptation plan is critical to the future quality of life for our City and region. We

understand this to be a prioritization issue, not a technical feasibility issue—we encourage the City to invest in adaptation planning now.

- Urban tree planting program is highly desirable. San Diego has lost much of its "green infrastructure" due to development, a situation made even worse by the major wildfires. Trees provide important environmental services such as removing pollutants from the air and helping with stormwater control. They benefit the hydrologic cycle by holding water and releasing it over time...making it available to other plants in the drier season. Shade they produce has a cooling effect. A properly chosen tree placed correctly near a building can reduce energy requirements for cooling. Trees sequester and store carbon. Trees enhance property value.
- The plan states that the urban tree planting program will prioritize areas with recycled water and greywater infrastructure. While the rationale for this is quite obvious, there's a need to determine whether communities of concern will be adequately addressed. If not, additional strategies should be developed to meet the needs of those communities and for an equitable outcome from investment made as a result of the Climate Action Plan.
- A comprehensive plan for adaptation to the effects of climate change is needed. It should include public health issues, biodiversity, coastal resources, water, agriculture, forestry, transportation and energy.

The Sustainable Energy Advisory Board is grateful for the opportunity to provide comments on the Climate Action Plan. We expect to be engaged throughout the development of future policy and in the implementing and monitoring of those policies that align to the Climate Action Plan.