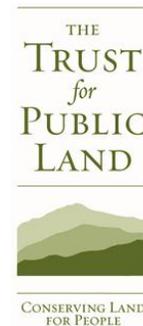




American Planning Association  
**California Chapter**

*Making Great Communities Happen*



August 17, 2012

California Energy Commission  
Dockets Office, MS-4  
1516 Ninth Street  
Sacramento, CA 95814-5512

California Energy Commission

**DOCKETED**  
**12-EPIC-01**

TN # 66818

AUG 17 2012

Re: Docket # 12-EPIC-01

CEC EPIC Program Staff,

On behalf of our organizations, we are writing to express our support and provide input to the Electronic Program Investment Charge (EPIC) Program. Our organizations collectively work towards creating green infrastructure in California communities, and represent non-profits, cities and counties, local agencies, and private industry.

We appreciate the opportunity to provide comments on the California Energy Commission's triennial investment plan for 2012-2014, and we are especially interested in the Applied Research and Development Program and support the staff recommendation of \$55 million per year investment.

We support the proposal that projects must provide electricity sector benefits for pre-commercial activities and technologies, and we suggest that this include energy efficiency and energy conservation techniques such as urban forests and urban greening. These mechanisms for sustaining green infrastructure have a clear nexus to many of the guiding principles of the EPIC program, including:

- providing ratepayer and societal benefits by providing energy savings from shade and cool surfaces and reduced urban heat island effect, while sequestering carbon, improving air quality, and offering improvements to water quality, public health, and quality of life
- promoting AB 32 goals through carbon sequestration and reducing greenhouse gas emissions
- consistency with "loading order" in that it supports energy conservation through reducing demand
- helping achieve safe, reliable and affordable energy services through cost effectiveness and reduction in energy demand

- supporting economic development through the generation of thousands of local non-exportable jobs and a multi-billion dollar industry in California, while also providing cooler, healthier, more pleasant and aesthetically pleasing downtown business districts and improving property values
- maximizing efficient use of ratepayer funds again through cost effectiveness and reduction in energy demand

Urban forestry, urban greening and green infrastructure fit within the Public Resources Code sections 25216 and 25401 respectively, which among other things, speak to the Energy Commission carrying out research on “topics related to energy demand, ecology, and conservation which are of statewide importance” and “reducing wasteful, inefficient, unnecessary, or uneconomic uses of energy.”

Cities and other developed areas are profoundly vulnerable to climate change impacts. Increasing the density of development and populations coupled with more extreme weather events will increase energy usage and heat-related mortality risks while also having other potential negative impacts to citizens and the environment (e.g., increased ozone and flooding).

California is home to the most densely populated communities, with 95% of the 38 million residents living on 5% of the land. Protection and proactive management to curtail catastrophic impacts of climate change through green infrastructure strategies makes economic sense and stand an excellent chance of being embraced and implemented by communities in their climate action plans.

Cities should have robust climate management programs that focus on more than emission reductions. The singular objective of emission reductions or control (i.e. mitigation) has long term benefits, but it needs to be combined with adaptation strategies to address immediate impacts that are relevant to California communities.

Adaptation strategies like tree planting, local parks, green roofs, and other green infrastructure provide both mitigation through sequestration and adaptation through Urban Heat Island reduction to climate change. At the same time, these techniques provide concurrent benefits in stormwater retention, air quality improvements, property value increase, health/fitness opportunities, and biodiversity.

Some initial research has confirmed the potential cost-effectiveness of urban greening strategies in terms of carbon sequestration, energy savings and other benefits; however, more could be done to expand and enhance the wide scale implementation of green infrastructure as a cost-effective technique for helping improve energy efficiency and address AB 32 goals, while also providing human and environmental health benefits to California and its communities.

Urban forestry, urban greening and green infrastructure would be a potential Efficiency and Demand Side Management investment topic for the Applied Research and Development Program. Some examples of critical research that should be funded by the program include the following:

- Regional assessments (for different climates within the state) of carbon storage, sequestration, and displaced emissions from energy savings, as well as water use, and life cycle assessments
- Carbon equivalencies for Urban Heat Island mitigation and energy demand reduction effects
- Landscape water issues, including the amount of water used for landscapes and the energy/carbon equivalents, the potential to conserve water, vulnerability and resilience of tree populations in the changing climate, and the potential impacts of reduced landscape water use on Urban Heat Island effects, human thermal stress and air quality
- “Green Area Ratios” for cities or cost-benefit analyses of trees and other green infrastructure strategies that quantify carbon sequestration and concurrent adaptive benefits and give communities the tools to plan for green infrastructure investments based on their cost-effectiveness for their geographic area and corresponding climate
- Land use planning and design studies and programs that address policy and regulatory barriers and opportunities to equip communities with the tools to plan and implement green infrastructure
- Urban biomass/tree residue utilization, marketing and technological barriers and opportunities

Thank you for the opportunity to provide input to the development of the EPIC program. We would be happy to discuss this further or provide additional information upon request.

Sincerely,



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California ReLeaf



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California Urban Forests Council



Bruce Reznik  
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