Thanks for the opportunity to comment on the Concept Paper for the Cap-and-Trade Auction Proceeds Second Investment Plan

The Second Investment Plan draft identifies the emission reduction goals set forth by the Governor and outlines priority investment concepts. As the Plan recognizes, the State will depend on new technologies being developed, tested, and deployed to achieve these goals. Some of these technologies may be in the concept formation state while others may not yet exist. While the Plan mentions in the overarching themes the opportunity to engage “public and privately-partnered demonstrations and deployments” to identify which technologies can deliver economic returns, this Plan may benefit from implementing a small grants program to provide much needed technology solutions needed to achieve the goals. Such a program would fund prototypes, concept testing and facilitate start-ups thereby accelerating the pace of bringing new solutions to market and support new job growth. The program must help small businesses conquer the “valley of death” that exists between having developed and tested a feasible technology and bringing the technology to market.

The California Energy Commission has funded the very successful Energy Innovations Small Grant (EISG) Program has since 1999. The program has a proven track record of funding technologies that reduce carbon emissions and improve energy efficiency. The EISG program has evaluated thousands of technologies, administered over 430 awards, and achieved a 40:1 return on investment (ROI) ratio. For more on this program, please see: https://www.youtube.com/watch?v=R0xkXdBSQtY

The Investment Plan would benefit from a small grants program aimed at small businesses, non-profits, individuals and academic institutions. The EISG program is already in place and leveraging this program infrastructure could accelerate prototyping and fielding of new technologies to meet the greenhouse gas reductions. EISG program has significant experience with the awarding and execution of small grants as well as an active technology transfer follow-on component. The small grants program experience and expertise can be leveraged in the following Potential Investment Concepts:

* ***Clean Energy & Energy Efficiency***. The largest portion of EISG program funding has been aimed at renewable energy generation and energy efficiency technologies. The program’s clean energy portfolio includes photovoltaic, geothermal , biomass, fuel cell, and wind technologies and efficiency technologies. Energy efficiency technologies have included HVAC systems, battery/power storage, power quality and processing, and combustion engine efficiencies.
* ***Natural Resources & Waste Diversion***. Program technology experience also include efficient and effective biogas treatment, biodigester operations, and wastewater treatment.
* ***Transportation & Sustainable Communities***. A smaller portion of the program technology experience include particulate matter elimination in flue gas and exhaust. Sustainable communities technology experience include power generation and storage aimed at microgrids.

Implementing a small grants program could significantly speed up the reduction in greenhouse gas emissions and should feature in the new Triennial Investment Plan.

Sincerely,

Frank H. Steensnaes

EISG Technology Transfer Program

San Diego State University Research Foundation

Tel: 619-594-7215