

DOCKET

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Subject line: Docket No. 09-ALT-1, 2010-11 Investment Plan

In response to the California Energy Commission's request for comments on the *2010-2011 Investment Plan for the Alternative and Renewable Fuel and Vehicle Technology Program*, the Southern California Marine Institute (SCMI) is submitting the following notes.

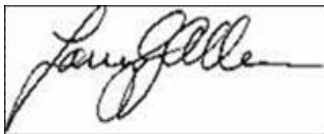
In the discussion on Natural Gas (page 30 in the 2009 version of the Investment Plan), please include the following comment in the section that discusses capturing methane from landfills and dairy farm digesters.

"The Southern California Marine Institute (SCMI) is evaluating open-ocean farming of *Macrocystis pyrifera* (macroalgae known as California Giant Kelp) for high-grade biomass feedstock. SCMI notes that *M. pyrifera* has several positive characteristics: grows 30 cm per day, does not compete for land or fresh water, does not contain cellulose or lignin, and can be readily composted for biomethane with a processing system similar to that used for animal manure at dairy farms."

In reviewing the *2006 Preliminary Roadmap for Development of Biomass in California*, we see that page 13 mentions, "Increasing production [of biomass feedstocks] could also come from algae under high-intensity culture systems, and marine biomass crops." Based on our reading, the SCMI evaluation of kelp as a source of biomass is working toward the intent of this statement.

We are attaching a summary document to provide background on the research effort and references cited. If you have additional questions, please contact us.

Sincerely,



Larry Allen, Ph.D.