

The Renewable Natural Gas Industry Action Group (RNG-IAG) is a national industry collaborative made up of organizations active in the development, distribution, and usage of Renewable Natural Gas.

RNG-IAG focuses on developing effective incentive and policy mechanisms to support the development of a sustainable industry and market for RNG.

Members:

California Natural Gas
Vehicle Coalition

CALSTART

Southern California
Gas Company

Trillium USA

Westport Innovations Inc.

DOCKET

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TO: California Energy Commission Commissioners and Staff
FROM: Members of the Renewable Natural Gas Industry Action Group (RNG-IAG)
RE: Docket Number 10-ALT-1 – Advisory Committee for AB 118

As members of the Renewable Natural Gas Industry Action Group, we would like to provide comments on the California Energy Commission (CEC) draft investment plan for the AB 118 Alternative and Renewable Fuel and Vehicle Technology Program. We recognize and appreciate the rigorous analytical work that has gone into the production of this plan. The plan lays out a balanced and reasonable approach to clean transportation technology funding, which will ultimately help California to reduce oil dependence and transportation-related emissions. We strongly support the planned investment in natural gas and biomethane (referred to in this document as Renewable Natural Gas, or RNG), as this is a proven technology that can yield important economic, environmental, and petroleum reduction benefits today. We appreciate the opportunity to provide input, and have provided comments specific to RNG below.

RNG Production and Support

We applaud the planned investment in RNG production and support. RNG should be an important part of California's transportation future. It can be produced from waste feedstocks and is the lowest carbon fuel analyzed to date by the California Air Resources Board (CARB) for the purposes of the state's Low Carbon Fuel Standard (LCFS). While RNG has great potential, significant barriers remain and additional funding is indeed needed. RNG is not yet cost-effective for private developers due to issues of scale and costs associated with testing and distribution. There are also outstanding regulatory barriers to RNG production and distribution. We agree with staff that "in order for the biomethane for transportation industry to successfully develop, California will have to ensure supportive government policies and additional financial incentives." We also agree with staff that "it will be important that there is access to natural gas pipelines" and that interconnection costs can be a financial burden. Our comments on CEC's proposed \$8 million investment in RNG production and support are below.

- **Support for gas quality testing and interconnection is a smart investment.** We agree with staff that access to natural gas pipelines is both vitally important and currently problematic. Interconnection and testing can be very expensive and public investment is needed to address these barriers. Gas quality testing will be required for many types of projects, including those with new feedstocks or co-digestion. These tests can be expensive and represent a major barrier to pipeline distribution of RNG. The issue is further compounded by the lack of a generally accepted gas

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specification standard for RNG. Public support for testing will help address the overall testing problem, though a standard is necessary over the longer term.

- **Ensure that investments provide meaningful support to multiple projects.** Some of the past AB 118 awards for RNG have been very large and/or a significant portion (near half) of available funds. Given the smaller size of this year's funding allocation, CEC must consider the appropriate project size. The goal should be to fund multiple projects using different feedstocks. This will require limiting the award size so as to allow for multiple awards, while simultaneously taking care to not spread the investments too thin. We recognize that CEC will need some flexibility to adjust plans based on the quality of project proposals received, but we encourage staff to consider some general guidelines on project size that will allow for a number of meaningful investments. Recent USDA data shows lagoon digester installations averaged between \$1Million and \$3Million, giving a relevant range for project grants.
- **A general focus on pre-landfilled waste materials makes sense.** In general, we support CEC's proposed focus on pre-landfilled waste materials as feedstocks. Projects using pre-landfilled waste offer greater potential benefits and currently require greater public support. However, we encourage staff to maintain the flexibility to fund landfill RNG projects. Limiting the scope of potential projects before reviewing project proposals could hurt CEC's ability to invest in a diversified portfolio of RNG projects.

Given the potential benefits of RNG for California and the scale of the remaining barriers, we strongly encourage CEC to ensure that the final AB 118 investment plan includes, at a minimum, the recommended \$8 million in funding for RNG production and support. We believe the program will be oversubscribed and that a larger amount would be justified, but we understand the budgetary constraints and the need to support a diverse portfolio of fuels.

Medium and Heavy Duty Vehicles

As noted in the draft plan, medium and heavy duty vehicles are responsible for a large share (16%) of California's petroleum usage and greenhouse gas emissions. They are also a major source of criteria emissions throughout the state. Additionally, as outlined in the plan, medium and heavy duty vehicles are very heavy users of petroleum on a per-vehicle basis and therefore "represent an excellent opportunity to expand alternative fuel use, reduce petroleum consumption, and lower greenhouse gas emissions." Natural gas in general, and RNG in particular, is a very logical choice in the medium and heavy duty sector. However, incremental upfront costs remain a barrier. We therefore applaud CEC's planned investment of \$11.75 million in natural gas vehicle purchase incentives. Specific comments are below:

- **Design a simple and streamlined incentive program for natural gas trucks.** The program should treat liquefied natural gas (LNG) and compressed natural gas (CNG) equally. We also recommend that the incentive be stepped, based on GVWR class,

with heavier vehicles receiving greater funding due to their relatively high incremental costs.

- **Provide additional funding for trucks that will be RNG-powered.** A simple “plus-up” over the standard incentive levels for trucks that will be powered by RNG would facilitate the development of an economically viable industry for RNG as a transportation fuel in California.

Natural Gas Refueling Infrastructure

CEC is correct in noting that market transformation for natural gas (and therefore RNG) will only occur when range anxiety and fleet fueling concerns are addressed. To the extent that CEC decides to invest in refueling infrastructure, we recommend additional funding, preference, or a set-aside for infrastructure that will be used to dispense RNG.

Technical Assistance and Analysis

One of the strengths of the CEC’s AB 118 program is that it can provide funding for technical assistance and analysis. We encourage CEC to consider allocating some of this funding to build upon the efforts to develop a comprehensive statewide inventory of potential RNG feedstocks, and the resulting RNG fuel production potential and price impacts. In contrast to efforts to date, this analysis should include an evaluation of feedstock accessibility and economic considerations around the use of a given feedstock. Simply understanding technical potential is an important first step, but the development of a sustainable RNG industry requires deeper analysis that addresses feedstock accessibility and economics. This will assist in the development of a strategy to enable the coordinated adoption of RNG for both heavy-duty and light-duty transportation applications. Additionally, a rigorous environmental lifecycle assessment for additional RNG feedstocks (e.g. MSW, gasification of dry biomass) would help with the development of these promising fuels.

Outreach and Education

In addition to technical assistance and analysis, we suggest that CEC consider investing in targeted outreach efforts to support the development of a strong RNG industry in California. Educating end users and local communities about the potential and benefits of RNG as a vehicle fuel should increase demand for RNG in transportation applications. Targeting areas where feedstocks are readily available (including, but not limited to, communities near landfills, dairy operations, or wastewater treatment facilities) would improve the chances of finding economically viable projects. A targeted outreach program would require only a modest investment but would be very valuable in helping to “kick start” California’s RNG industry.

Advanced Vehicle Technologies

The draft plan includes a planned investment of \$7 million in development and demonstration of new technologies for the medium- and heavy-duty vehicle sector. CEC states that this funding will “extend to a broad variety of advanced technology projects, including hybrid hydraulics, battery electric, fuel cell, but will also consider improvements to gaseous fuel engines and systems.” We recommend that CEC amend this language to specifically allow funding for natural gas hybrid vehicles. While this is not a near-term priority for advancing RNG, it is a wise long-term investment. If California is able to successfully jump start the RNG market, natural gas hybrids running on RNG have the potential to drastically improve the environmental performance of the state’s vehicle fleet.