

DOCKETED

Docket Number:	21-ESR-01
Project Title:	Energy System Reliability
TN #:	247801
Document Title:	Tenneco Inc Comments - In support of alternate fuels
Description:	N/A
Filer:	System
Organization:	Tenneco Inc.
Submitter Role:	Public
Submission Date:	11/30/2022 8:37:56 AM
Docketed Date:	11/30/2022

*Comment Received From: Tenneco Inc.
Submitted On: 11/30/2022
Docket Number: 21-ESR-01*

In support of alternate fuels

Additional submitted attachment is included below.

Before the California Energy Commission

Comments to Docket 21-ESR-01

Energy System Reliability



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I. Introduction

Tenneco's Powertrain business group supports a pragmatic approach of complementary technologies that provide solutions for different transportation sectors. We contend it's not combustion-engine technology causing GHG emissions; it is the fuel used in the ICE that defines the emissions.

II. Background

In Docket # 21-ESR-01 the California Energy Commission (CEC) is seeking to identify clean energy resources and characterize their ability to support grid reliability. The CEC is required to conduct an assessment and comparison of clean energy alternatives to support grid reliability and make recommendations to expand their deployment.

The following comments are in response to the Request for Information (RFI) on Clean Energy Resources for Reliability regarding the potential resources and attributes for consideration in these analyses.

III. General Comments on the Request for Information on the Clean Energy Reliability Investment Plan (CERIP)

As stated in the RFI, the CERIP is intended to be limited to clean energy resources so it would not consider any fossil solutions, but for comparison purposes it anticipates considering a wider variety of resources in the analysis.

We strongly encourage that the CEC in its evaluation include a fair and transparent evaluation of reciprocating engines using renewable fuels simply because it is in the conversion of energy where carbon is released to the atmosphere (fuel centric).

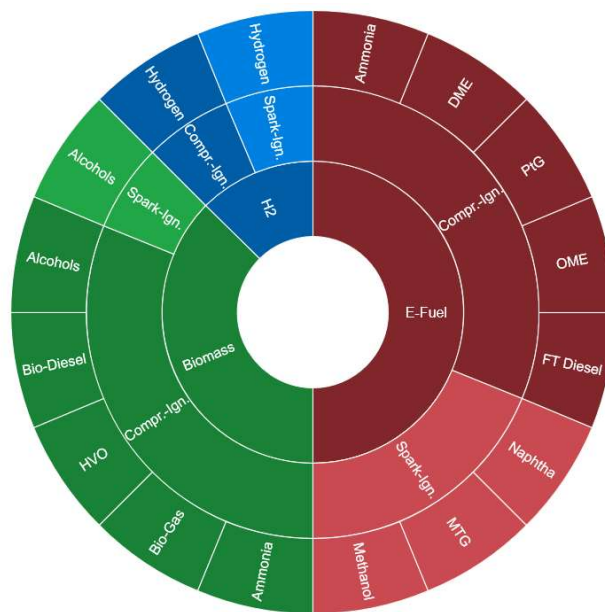
There are effective, near-term means to address atmospheric carbon release, so the journey toward a lower GHG future can start today. Furthermore, current policy does not address weak points. For example, sources of renewable energy are intermittent in nature (i.e., wind, sunlight). Further, there are inherently hard to abate sectors that are critically important to the California economy, such as agriculture, off-road and industrial internal combustion applications.

A fuel-centric approach takes advantage of existing industrial inertia for engine manufactures, and uses the existing distribution infrastructure for the fuels themselves.

A. Advanced renewable diesel fuel (RD) also known as hydrogenated vegetable oil (HVO) should be considered by the CEC in its evaluation of Clean Energy Resources for Reliability

As expected, the CEC’s RFI focuses heavily on non-fossil-based resources such as fuel cells, solar, and wind. Advanced fuels, renewable diesel fuels, are proven for agriculture, off-road, industrial, and generators. The latter are utilizing these low-carbon fuels currently in service in California to support commercial customers, in microgrid applications and as part of the utility strategy for the planned safety power shutoffs (PSPS).

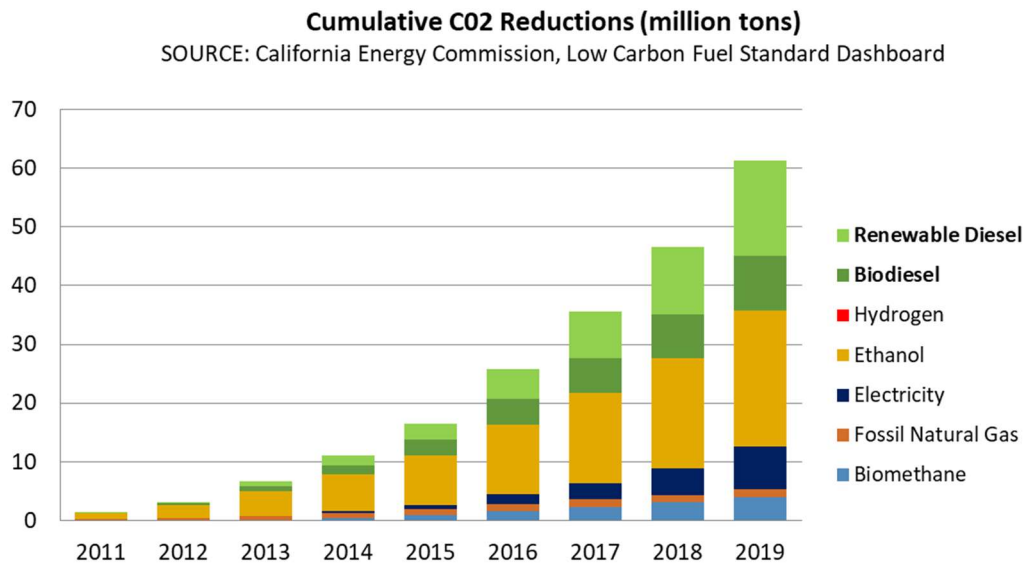
Carbon reduction fuel sources, applications:



HVO is likely the most applicable as a drop-in replacement fuel today, followed closely by Alcohols (i.e., ethel and methyl), and, longer-term, Hydrogen.

HVO can be used in existing diesel engines without modification and is compatible with existing diesel infrastructure and stations. HVO meets California Air Resource Board (CARB) motor vehicle fuel specifications under Title 13, California Code of Regulations (CCR), section 2281 et seq., and meets the aromatic, sulfur, and lubricity standards, of ASTM specification D975-12a.1.HVO is widely available in California and is presently.

Quantifiable outcomes of using such fuels can be seen in the following data assembled by the CEC.



Respectfully submitted,

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