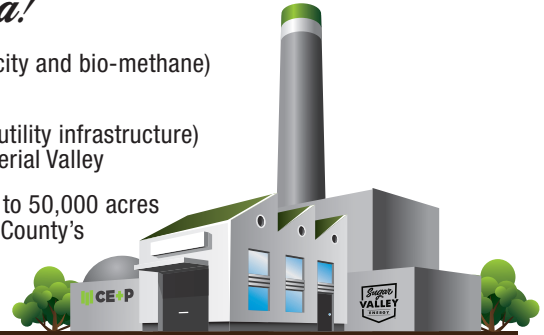




## *In Imperial County, California!*

- Sustainable low-carbon energy (ethanol fuel, electricity and bio-methane) from the right renewable resource – sugarcane
- Infrastructure (clean energy, wastewater treatment, utility infrastructure) to support further economic development in the Imperial Valley
- A long-term economically sustainable market for up to 50,000 acres of sugarcane crop production that expands Imperial County's agricultural employment base



## The Future of Ethanol – A Key Part of a Carbon-Neutral Economy

### PASSENGER VEHICLES NEED ETHANOL, CALIFORNIA NEEDS PASSENGER VEHICLES

- In 2018, the transportation sector was responsible for 28.2% of all US greenhouse gas emissions — the largest share of any sector — with light-duty vehicles generating over half of the emissions in this sector.<sup>4</sup>
- According to the California Department of Motor Vehicles, more than 26.1 million passenger vehicles were registered in the state in 2019<sup>1</sup>
- California had just 256,800 EV registrations in 2018, accounting for 47% of the nation's total, according to the US Department of Energy<sup>2</sup> Only 1% of California vehicles were electric in 2018.
- Adoption of electric vehicles remains slow due to high vehicle cost and "range anxiety."
- While California law requires that New Passenger Vehicles sold in 2035 and beyond be zero-emission vehicles (ZEVs)<sup>3</sup> it does not outlaw older vehicles on the road, or out-of-state vehicles driving into California.



### ETHANOL'S ROLE IN REDUCING CARBON EMISSIONS

- The levels of oxygen in ethanol (35%) mean that fuel combustion is more 'complete' and tailpipe emissions are reduced. Ethanol also displaces benzene, which is linked to cancer, and is a non-toxic, water-soluble, and biodegradable fuel.
- Renewable Fuel Standard (RFS) mandates US motor fuel be blended with renewable fuels like ethanol.
- In California that blend is currently 10% (E10) and there is government and advocacy support to increase this to 15% (E15).<sup>5</sup> This would be a 50% increase in the use of ethanol for passenger vehicles alone.

### THE FOLLOWING MANUFACTURERS HAVE APPROVED E15 FOR THEIR 2021 MODELS<sup>6</sup>



The US is the largest ethanol producer in the world with over 15 billion gallons per year of operation capacity production. Around 94% of US production is in the Midwest, with more than 99% of this produced from corn feedstock.

Sugar Valley Energy's Essential Ethanol™ will be certified as having the lowest carbon intensity (CI) of any commercially available ethanol product and is the only sugarcane ethanol pathway certified by CARB (California Air Resources Board).

#### LOCALLY MADE SUGARCANE ETHANOL BENEFITS THE REGIONAL ENVIRONMENT

SUGARCANE SEQUESTERS CO<sub>2</sub> DURING ITS GROWING PERIOD

**40**

TONS PER ACRE  
greater amounts than most other commercial crops

**2.8**  
**MILLION**  
**TONS OF CARBON**

sequestered by  
Sugar Valley Energy's  
48,000 acres of  
sugarcane crop

#### MAKING SUGARCANE ETHANOL LOCALLY CREATES JOBS AND ECONOMIC BENEFITS

**15,122**



**JOBS IMPACTED**  
through development,  
construction and  
first year  
of operations

**250**

permanent new jobs

**2000**

additional  
agricultural jobs  
supported

**48,000+**

**ACRES OF SUGARCANE**

provide a stable, long-term  
income for local growers

**SUGAR VALLEY ENERGY IS A SUBSIDIARY OF CALIFORNIA ETHANOL & POWER, LLC. [WWW.CALIFORNIAETHANOLPOWER.COM](http://WWW.CALIFORNIAETHANOLPOWER.COM)**

1 <https://www.dmv.ca.gov/portal/uploads/2020/06/2019-Statistic-for-Publication-1.pdf>

2 <https://afdc.energy.gov/data/10962>

3 <https://www.gov.ca.gov/2020/09/23/governor-newsom-announces-california-will-phase-out-gasoline-powered-cars-dramatically-reduce-demand-for-fossil-fuel-in-californias-fight-against-climate-change/>

4 Environmental Protection Agency <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions#transportation>

5 "H.R. 8371 — 116th Congress: Next Generation Fuels Act of 2020." [www.GovTrack.us](http://www.GovTrack.us). 2020. April 1, 2021 <https://www.govtrack.us/congress/bills/116/hr8371>

6 Renewable Fuels Association, 2021 Report. [https://ethanolrfa.org/wp-content/uploads/2021/02/RFA\\_Outlook\\_2021\\_fin\\_low.pdf](https://ethanolrfa.org/wp-content/uploads/2021/02/RFA_Outlook_2021_fin_low.pdf)