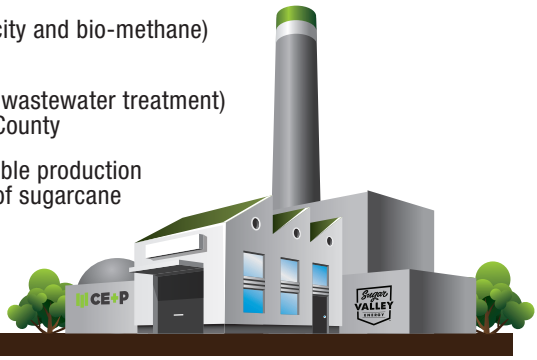
Sugar VALLEY ENERGY™

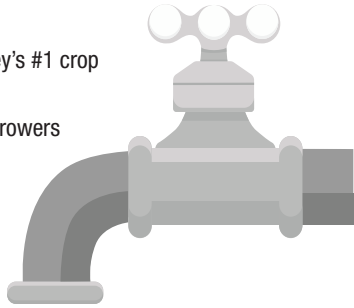
Home of CE+P

In Imperial County, California!

- Sustainable low-carbon energy (ethanol fuel, electricity and bio-methane) from the right renewable resource – sugarcane
- Project infrastructure (utility-scale clean energy and wastewater treatment) supports further economic development in Imperial County
- Imperial Valley is a long-term, economically sustainable production region with capacity to support SVE's 48,000 acres of sugarcane crop production
- New crop and industry diversify Imperial County's agricultural employment base



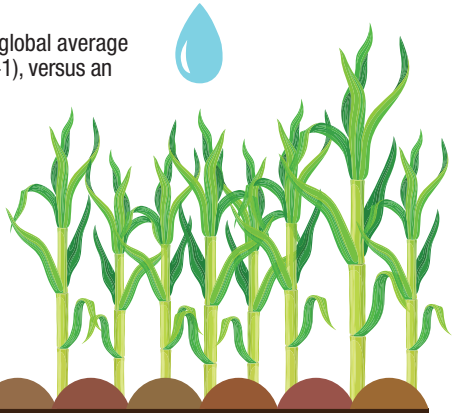
THE SUGARCANE CROP



- The water needs for sugarcane production in Imperial Valley are equal to those for alfalfa (hay), which currently represents the Valley's #1 crop in terms of planted acreage. In 2020, approximately 139,000 of the valley's 442,596 farmed acres were planted with alfalfa.
- The Sugar Valley Energy (SVE) facility will require approximately 48,000 acres of sugarcane feedstock and will contract with local growers for its planting and harvest.
- A portion of the field residue (tops and leaves) will be left infield after harvesting to conserve soil moisture and reduce irrigation requirements. In the hot environment of Imperial Valley, the overall irrigation savings due to leaving a field residue blanket could be of the order of 20-25%.[1]

SUGARCANE ETHANOL

- SVE sugarcane ethanol will have a 25% Lower Water Footprint Per Unit of Energy compared to corn ethanol.[2] The global average water footprint per unit of energy of bio-ethanol from sugarcane amounts to 91 cubic meters (m3) per gigajoule (GJ–1), versus an average water footprint of 121 m3 GJ–1 for maize (corn).
- SVE sugarcane ethanol will have a 26% Lower Water Footprint Per Liter of Ethanol compared to corn ethanol.[2] The global average water footprint is 2,107 liters of water per liter of sugarcane ethanol, versus an average 2,855 liters of water per liter of ethanol from maize (corn).
- The Carbon Intensity pathway (which accounts for land use changes and agricultural activities for the planted crops) assigned to SVE sugarcane by the State of California is 70% less than Midwest corn ethanol and 50% less than Brazilian sugarcane ethanol.
- Sugar Valley Energy BioRefinery/Energy Facilities Water Consumption is 1,000 AFY (Acre-Feet/Year), less than 5% of the Imperial Irrigation District's (IID) Water Supply total allocation to serve new industrial developments.



IMPERIAL VALLEY WATER RIGHTS & RISK OF DROUGHT

BASED ON THE LAW OF THE RIVER,[3] THE IID HAS WATER RIGHTS UP TO

3.1 MILLION

AFY (ACRE-FEET/YEAR)

Of this total, 2.6 million AFY are Present Perfected Rights: the most secure, vested rights dating to the early 1900s.

THE IMPERIAL IRRIGATION DISTRICT HAS

100 YEARS

of service delivery without reduction, even during severe drought events. The current legal understanding is that Present Perfected Rights will be prioritized even in the event of extreme drought

CONSERVATION AND TECHNOLOGY

IID has collaborated in recent decades with neighbor agencies on conservation measures and infrastructure to allow valley growers to produce the same supply of crops while conserving

500,000

AFY (ACRE-FEET/YEAR)

Both the Colorado River's ability to store water to mitigate periodic drought, and the high priority status of Imperial Valley's water rights means that IID faces minimum future supply risk.

SUGAR VALLEY ENERGY IS A SUBSIDIARY OF CALIFORNIA ETHANOL & POWER, LLC. WWW.CALIFORNIAETHANOLPOWER.COM

1 "Notes on sugarcane residue (trash) recovery", September 2020, (source: Booker Tate LTD)
2 https://waterfootprint.org/media/downloads/Mekonnen-Hoekstra-2011-WaterFootprintCrops.pdf
3 https://www.usbr.gov/uc/rm/crsp/