1. WELCOME AND INTRODUCTIONS

The meeting began with introductions and an overview of the San Diego Regional Alternative Fuel Coordinating Council (Refuel) and the goal of the Biofuel Subcommittee.

2. HISTORY/BACKGROUND OF BIOFUELS

Local biofuel producers of San Diego shared some information about their history in the region and work throughout the years.

New Leaf Biofuel was founded by Jennifer Case and has been in business since 2006.

- The producer mainly use recycled cooking oil from restaurants, turns it into biodiesel at a plant in Barrios Logan, and sells the fuel in the region.

- It is used by trucks, city vehicles, university vehicles, and SDG&E’s fleet, and airport transportation vehicles.

Pearson Fuels has been in business since 2003, offering 10 different fuels to the public.

- Installed the first E85 site on the West Coast of United States

- Business is mostly in Ethanol

- Ethanol cannot be shipped in the pipeline, so gasoline is shipped from refineries through pipelines to the Kinder Morgan Mission Valley terminal in which the gasoline is blended with ethanol at the rack. From the rack, trucks transport the resulting E10 gasoline blend throughout San Diego.

- There will be four E85 sites added in San Diego this year

3. STATE OF BIOFUELS

Fueling Stations Available

There are nine public E85 stations and only three B20 stations available in the San Diego region. It was mentioned that Northern California is converting biodiesel into renewable diesel.

- Brendan Reed (City of Chula Vista) asked what the difference is between renewable diesel and biodiesel.
  - Renewable diesel is made from a different process, one encompassing hydrocarbons. Renewable diesel is made in large facilities that are limited in number around the world due to their costliness. Most renewable diesel comes from outside of the United States, and it can be blended with diesel or biodiesel at any level.
Biodiesel is made locally from a local resource that will have local economic and environmental benefits.

The State’s Bioenergy Action Plan was brought up. Few participants of the subcommittee were familiar with this Plan.

- There are limited biodiesel stations and limited but growing E85 stations available to the public.

**How Biodiesel is Being Used in Fleets**

- The City of Chula Vista has been using biodiesel for four years and has a 10,000 gallon tank that fuels the heavy duty vehicles in the City, ranging from fire trucks and dump trucks. The City purchases 100,000 gallons of biofuel per year through New Leaf Biofuel.
- Mike Grim (City of Carlsbad) asked if biodiesel was less expensive than regular diesel. Mr. Reed explained that at first it was more costly due to insufficient on-site storage for diesel (resulting in daily shipments of the fuel); however, with additional capacity for storage, the cost decreased.
- Jennifer Case informed the subcommittee that biodiesel production intends to keep its selling price under that of diesel. She also mentioned that its price is discounted more if there are state and federal incentives.

**Myths Regarding Biofuels**

**Inconsistent State and Federal Support**

It is important to have policy that invests in the long term. The Renewable Fuel Standard was effective, but without an increase in the mandate, it is more difficult to keep prices low.

**Fluctuation in Supply, Cost, and Profitability**

- Infrastructure is seen as the biggest challenge since biofuels cannot be shipped through pipes, it must be blended on-site or at a customer’s storage tank. A vast majority of diesel users cannot access B20 (there are few public stations in the region) or own a storage tank because of cost and limited space.
- There are examples of fleet users who have stopped using biodiesel because it is too costly to upgrade underground storage tanks to be compliant with fire codes. Fleets are able to store fuel in above-ground storage tanks, but encounter issues with space, cost, and permitting (fire codes).
- There are many medium-to-light duty vehicles that are not compatible with B20 fuel, and these cars cannot use B20 without voiding their manufacturer’s warranty.
- Mr. Wood stated that permitting issues and why current standards are a barrier will be identified and addressed in toolkits.
- Mike Lewis (Pearson Fuels) mentioned that there is wavering support from the government due to the political climate. He went on to state that there is not a lot of support for E85 for many government entities, and the challenge is the economic model and permitting problems. He believes that with more commitment from cities towards buying these fuels that would help the biodiesel market.
- Funding must be readily available for B20 vehicles. Currently there is no funding for B20 vehicles.
E10 is already used in regular gasoline vehicles. E85 is meant for use by flex-fuel vehicles. Flex fuel vehicles account for 1 million cars in California and 60,000 in San Diego County. Many flex fuel vehicles do not use E85 because they are motivated by most the most prevalent fuel available (gasoline).

The Alternative Diesel Fuel ruling allows biodiesel blend B10 to be sold year-round if it has cetane level of 56 or greater, but only up to B5 in the summer if it has a cetane level of 56 or less. There are exemptions for New Diesel Technology Engines up to B20.

4. DISCUSSION FROM FUEL PROVIDERS

Issues
- Permitting of storage facilities.
  - There will be coordination between Mike Grim (City of Carlsbad), the city’s fire marshal, and fuel providers about permitting requirements.
  - Case study of above ground storage with the City of Carlsbad and fire marshal.

Success Stories
- The City of Chula Vista is using biodiesel in large quantities for heavy duty vehicles in their fleet.
- Renewable natural gas is being administered by Clean Energy for public use.

5. QUESTIONS/COMMENTS

- Mr. Evans spoke on the California Energy Commission’s Integrated Energy Policy Report (IEPR) that had a section on biofuels. It recommends data be provided on the potential of low carbon biofuels. Mr. Evans would like to see a table that documents the value of low carbon biofuels (benefits, comparisons, impacts to local economy, lifecycle of disposal, etc.)
- Mr. Lewis noted that millions of vehicles can use E85 or biodiesel, and in the long run, that makes an impact.
- Jack Hogan (Clean Energy) informed the subcommittee that any natural gas vehicle can fuel with renewable natural gas.
- Mr. Evans asked if renewable natural gas is being trucked in or if it is being taken out of natural gas pipeline infrastructure. Mr. Hogan responded that it is being taken out of pipeline infrastructure.

Attendees
- Mike Evans – Shell
- Brendan Reed – City of Chula Vista
- David Powell – U.S. Navy
- Jack Hogan – Clean Energy
- Jennifer Case – New Leaf Biofuel
- Danielle Brannan – New Leaf Biofuel
- Mike Lewis – Pearson Fuels
- Mike Grim – City of Carlsbad
- Nick Cormier – San Diego County Air Pollution Control District
- Susan Freed – County of San Diego
- Mike Rivers – County of San Diego
- Anna Lowe – San Diego Association of Governments (SANDAG)
- Michelle Martinez - SANDAG
- Kevin Wood – Center for Sustainable Energy (CSE)
- Jessica Jinn – CSE