

# **Solving Global Warming Plan A or Plan B**



Larry Eisenberg

Executive Director, Facilities Planning and Development

Los Angeles Community College District

# Renewable Energy Program

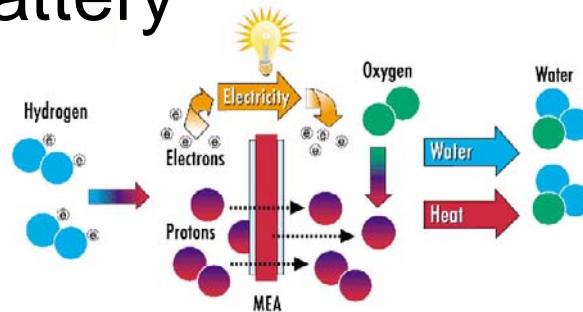
- Generation
  - Solar PV
  - Urban wind
  - Solar thermal
  - Geo thermal



# Renewable Energy Program

## Storage

- Thermal
- Electrolyzer
- Solid state hydrogen
- Fuel cells
- Lithium ion battery
- Flow battery



# Performance Contracts

## Third Party Arithmetic

Annual electric / gas bill before	\$ 1,000,000
Annual electric / gas bill after	<u>- \$ 800,000</u>
<b>Annual Difference</b> <b>(amount available for payback)</b>	<b>\$ 200,000</b>

# Alternate Energy

## Third Party Arithmetic

- Federal Energy Credit – 30%
- Accelerated Depreciation – 22%
- Bonus Depreciation – 5%
- Utility Incentives – 10%
- RECs – 5%
- Bulk Procurement – 10% (?)



**18 Cents on the dollar !!!**

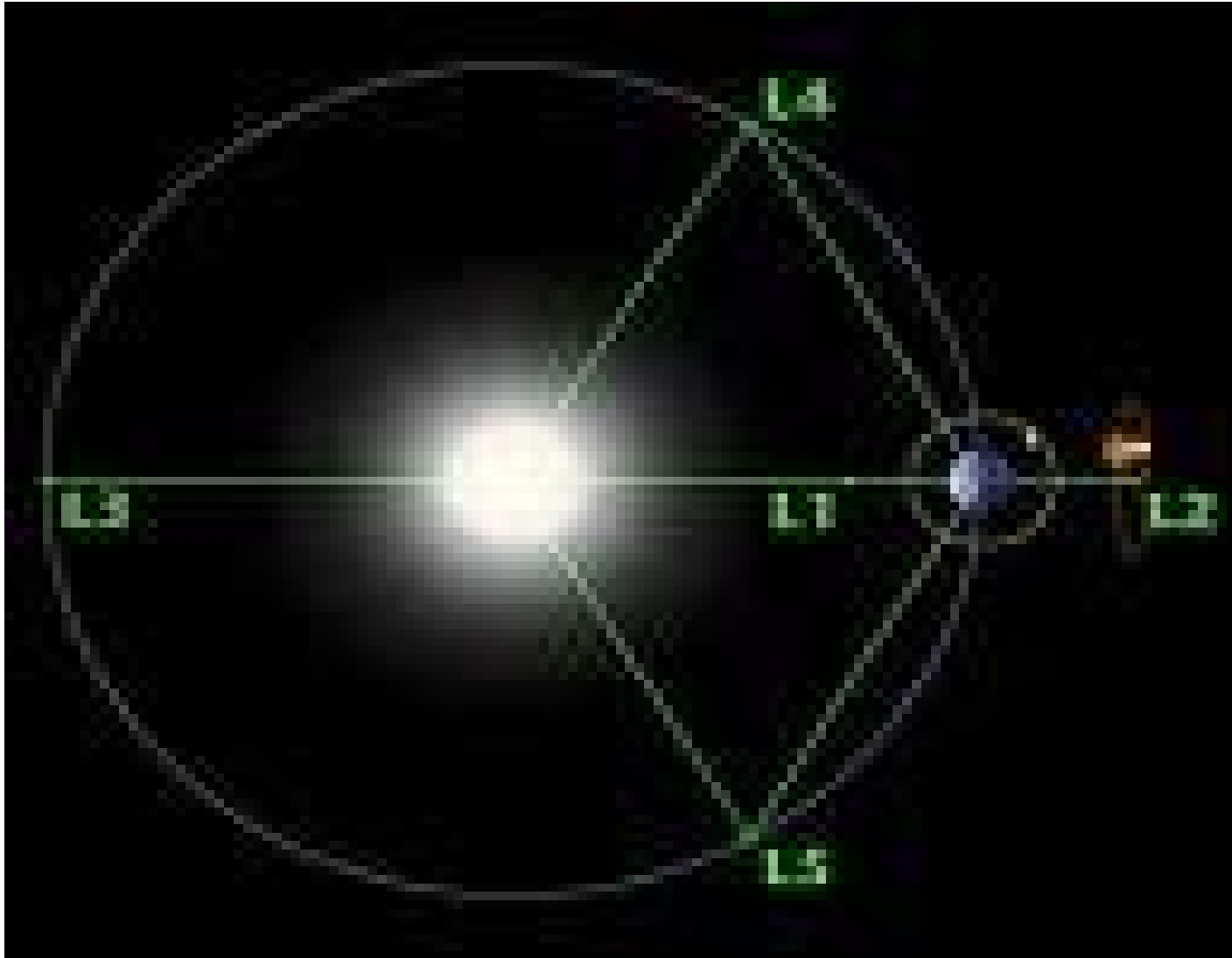
# Power Purchase Agreement

- Buy each KW of the electricity from the renewable array over 25 years
- Utility cost per KW = 21 cents
- Renewable cost per KW = 15 cents

**Instant annual cost savings**



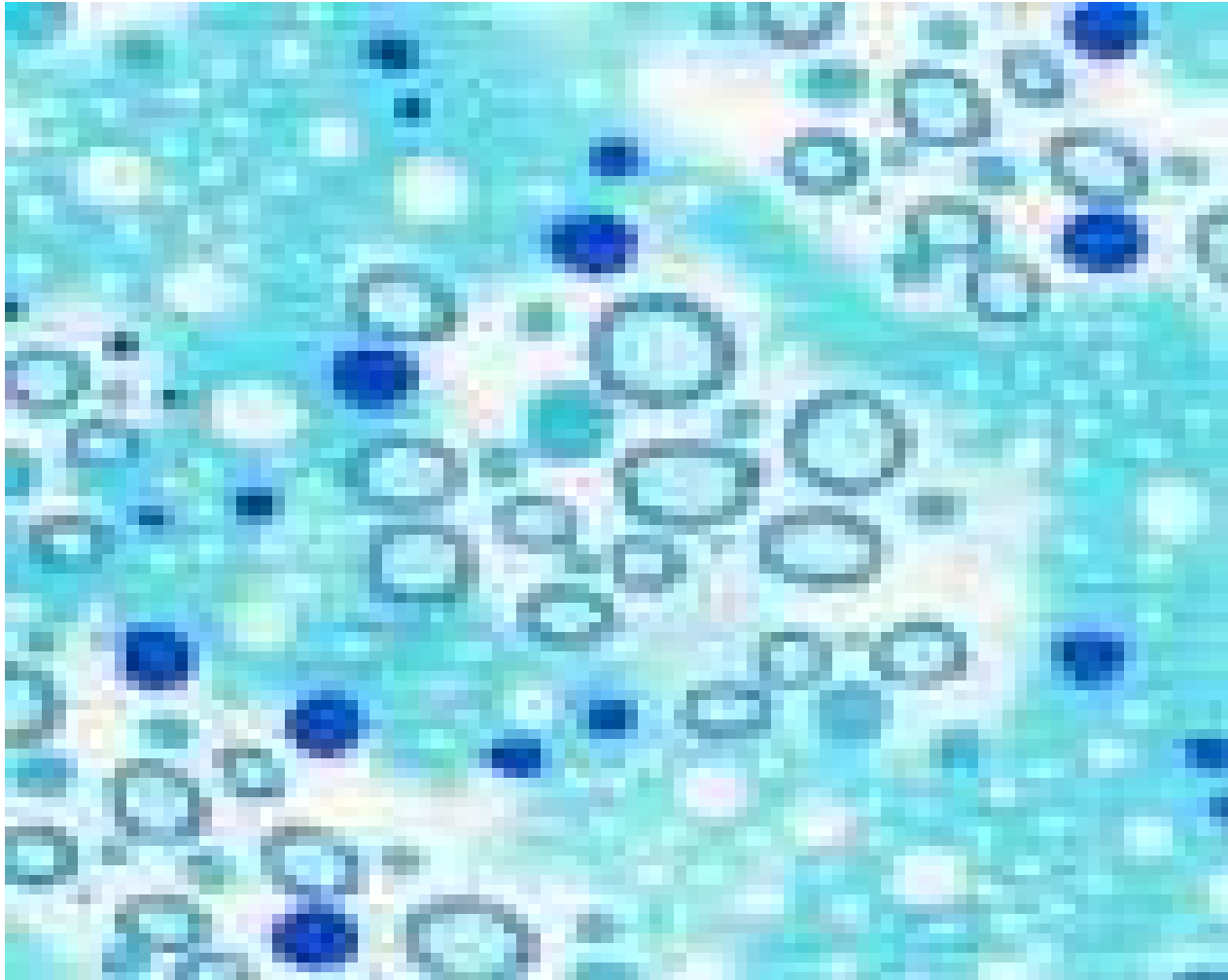
# Plan B – Solar Shading



# Plan B - Desertification



# Plan B – Ocean Bubbles



# Plan B - Volcanoes



**PLAN A**

**PLAN B**

**YOU DECIDE**