



### Imperial Valley Sustainable Futures

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#### The California **Energy Commission** is the state's primary energy policy and planning agency.

### CALIFORNIA ENERGY<sup>2</sup> COMMISSION

Forecasting: Forecasts future energy needs and maintains historical energy data

**Permitting**: Permits thermal power plants 50 MW or larger

**RD&D**: Administers research and development programs, advancing science and technology in energy related fields

**Energy Efficiency**: Promotes energy efficiency by setting the state's appliance and building standards (Title 20 & 24)

**Renewable Energy**: Supports the development of renewables through certification of facilities and verification of generation

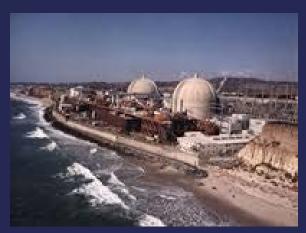
**Contingency Planning**: Plans for and directs the State's response to energy emergencies

**Transportation**: Supports deployment of alternative and renewable fuel sources

**IEPR**: Publishes the Integrated Energy Policy Report — the State's energy policy document



### **CHANGING SYSTEM**













# GREENHOUSE GAS EMISSION REDUCTION GOALS



2020: 1990 levels

2030: 40% below

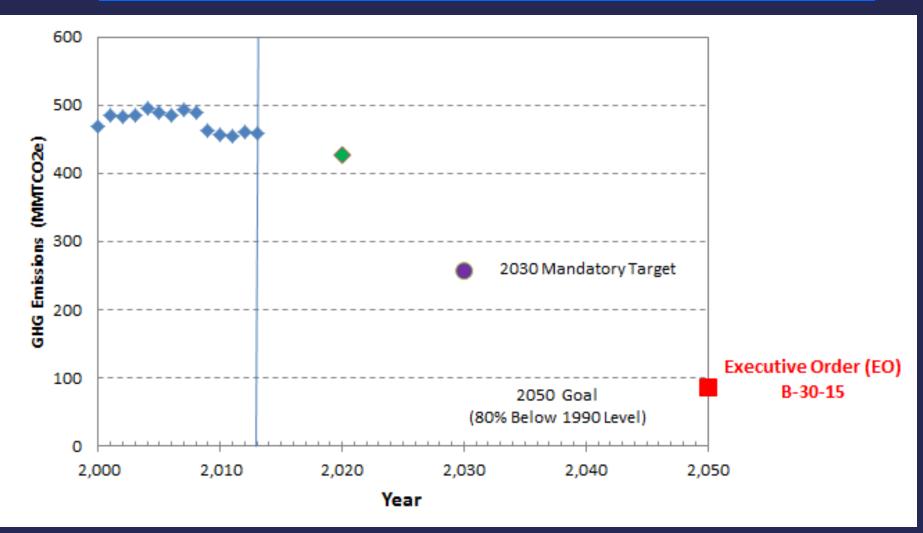
1990 levels

2050: 80% below

1990 levels



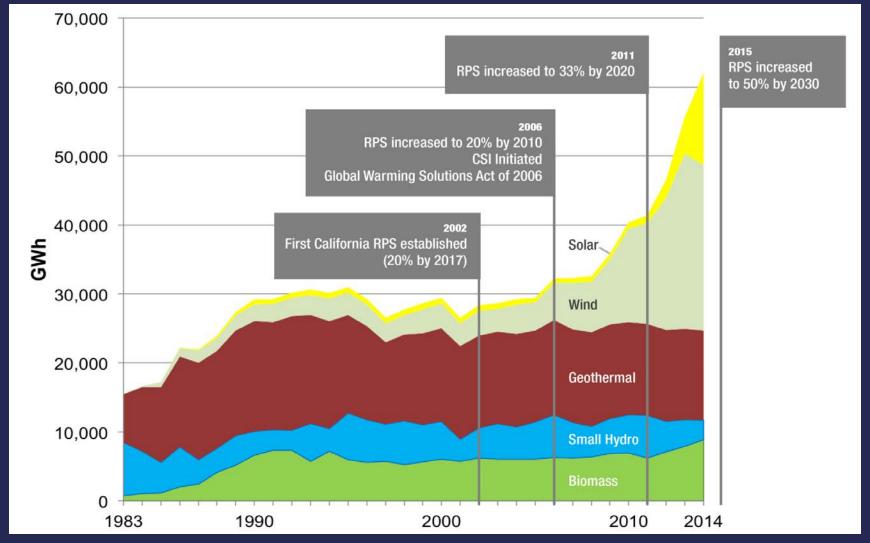
#### **EMISSIONS: THEN AND NOW**



Source: 2015 IEPR

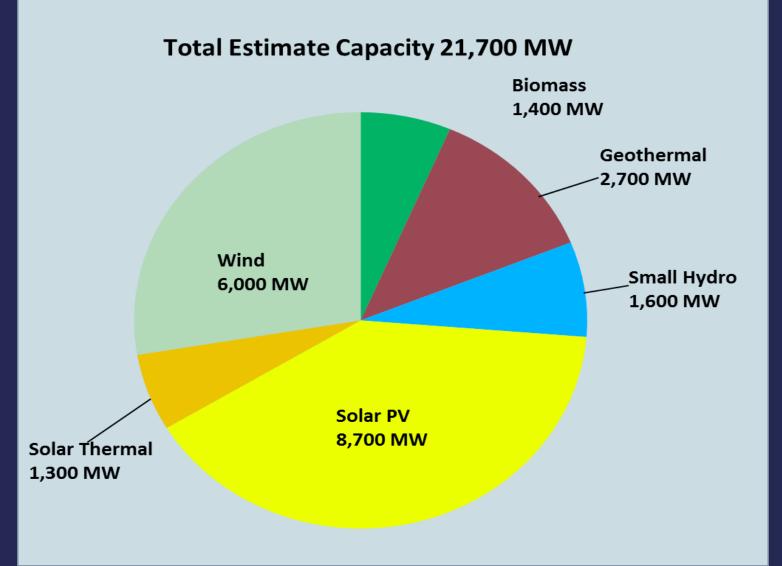


# CALIFORNIA RENEWABLE ENERGY GENERATION BY RESOURCE TYPE





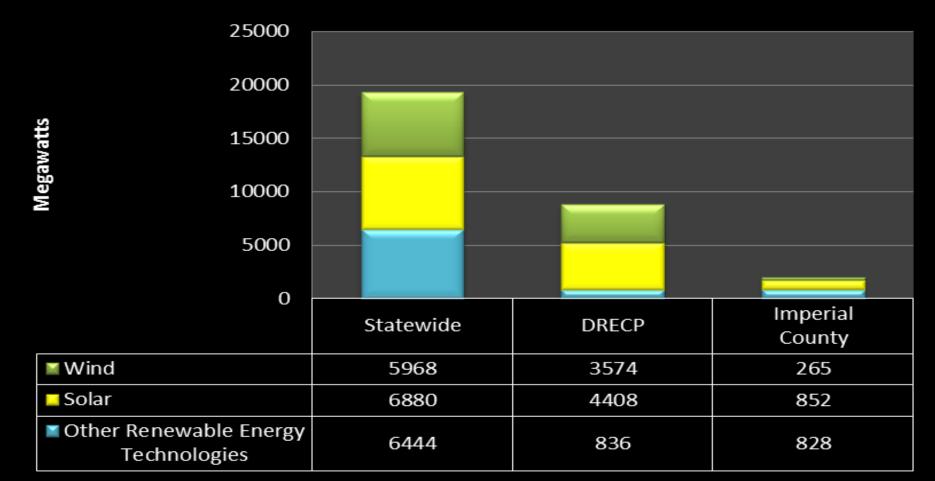
## IN-STATE RENEWABLE CAPACITY BY RESOURCE TYPE





#### RENEWABLE ENERGY

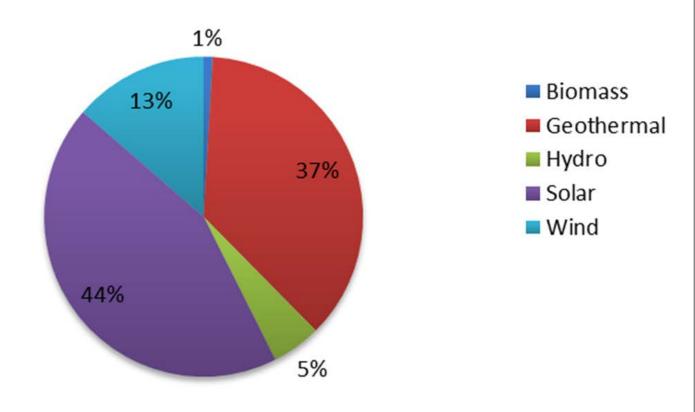
### On-line Renewable Energy Capacity California





## IMPERIAL COUNTY RENEWABLE ENERGY MIX

### Imperial County Renewable Energy Mix





# LANDSCAPE-SCALE PLANNING PROCESSES

- Desert Renewable Energy Conservation Plan (DRECP)
- San Joaquin Valley Least
   Conflict Solar

• RETI 2.0

