

# Renewable Energy Development

Imperial County, California

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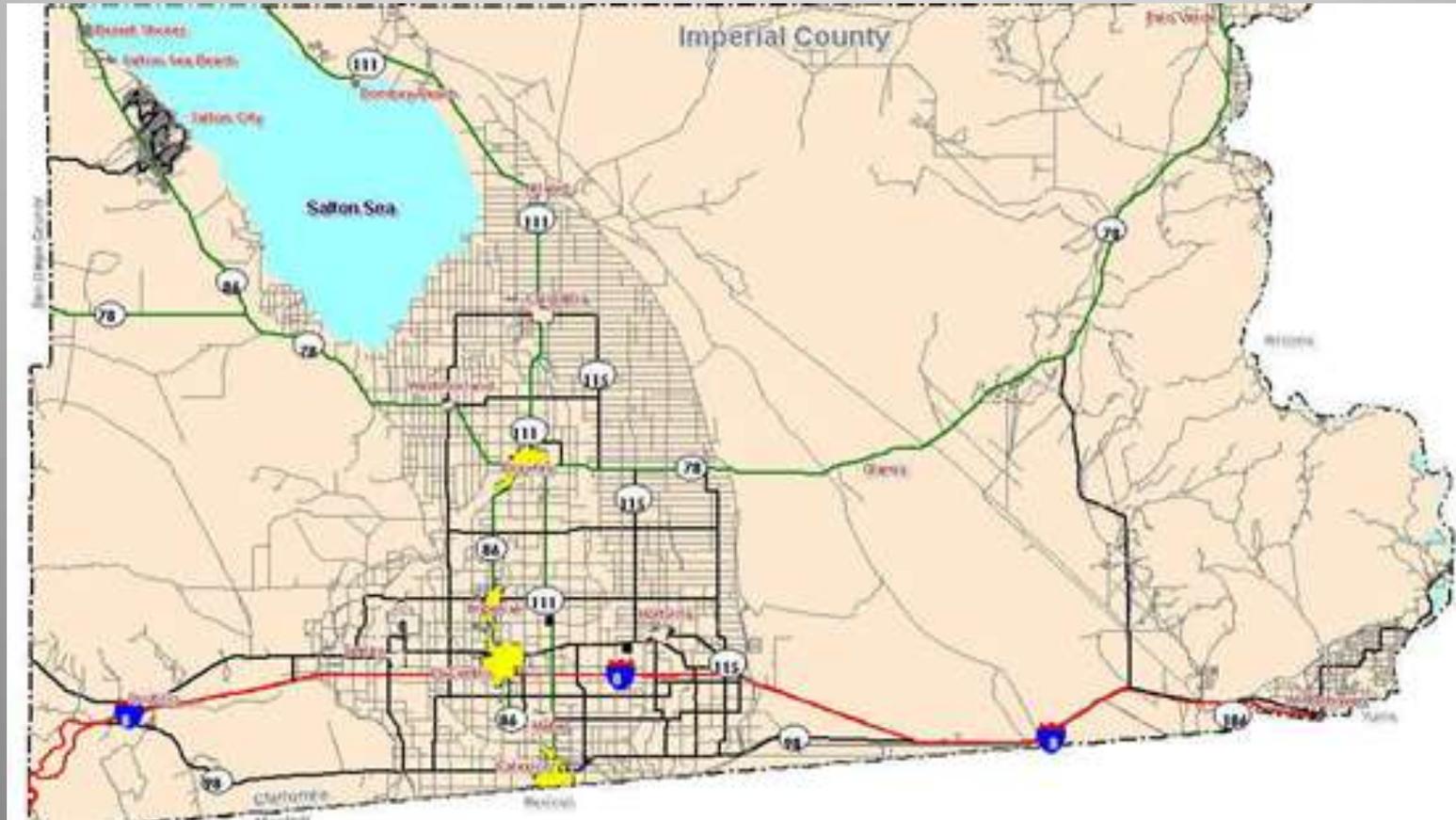


# Driving Green Energy Movement

- Energy Self-Reliance
- California Global Warming Solution Act- AB32
  - Law which sets **California Green House Gas** (GHG) emission **standards** for the next 50 years.
    - To 1990 levels by 2025
    - To be reduced 80% below 1990 levels by 2050
- Renewable Portfolio Standard (RPS): A regulation that requires the increased production of energy from renewable energy sources.
  - 20% by 2010
  - 33% by 2020

# Land Use

- Imperial County extends over 4,597 square miles.
- Largest land owner is the Federal government (49.6%)
- 22.7% is private land in the desert/mountains
- 18.1% is irrigated agricultural land
- Ag Land Conversion Issue



# COMPARISON

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The Imperial Valley has 540,942 acres in farmland.

Applicants have proposed approximately 10,000 acres of solar farms in Ag land.

Currently Solar farms are proposing an estimated 2% of land designated as agriculture.

Projects already approved encompass 320 acres.



# Discussion Topics

## ✓ Land Use Compatibility

➤ *Right to Farm*

➤ *Dust*

➤ *Conversion*

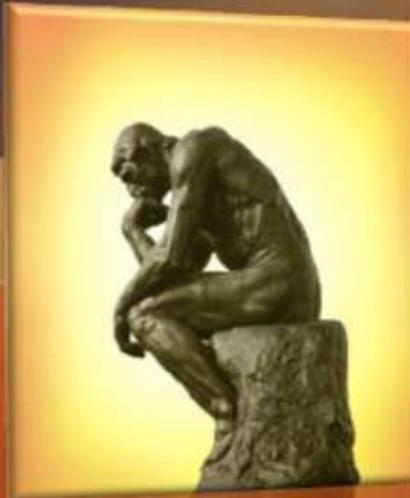
➤ *Temporary*

➤ *Permanent*

➤ *Visual/Aesthetics*

➤ *Water*

➤ *Power Lines*



## ✓ Economic Impact to the Valley

➤ *Direct and Indirect Effects*

➤ *Employment*

## ✓ Fiscal Impact on County Services

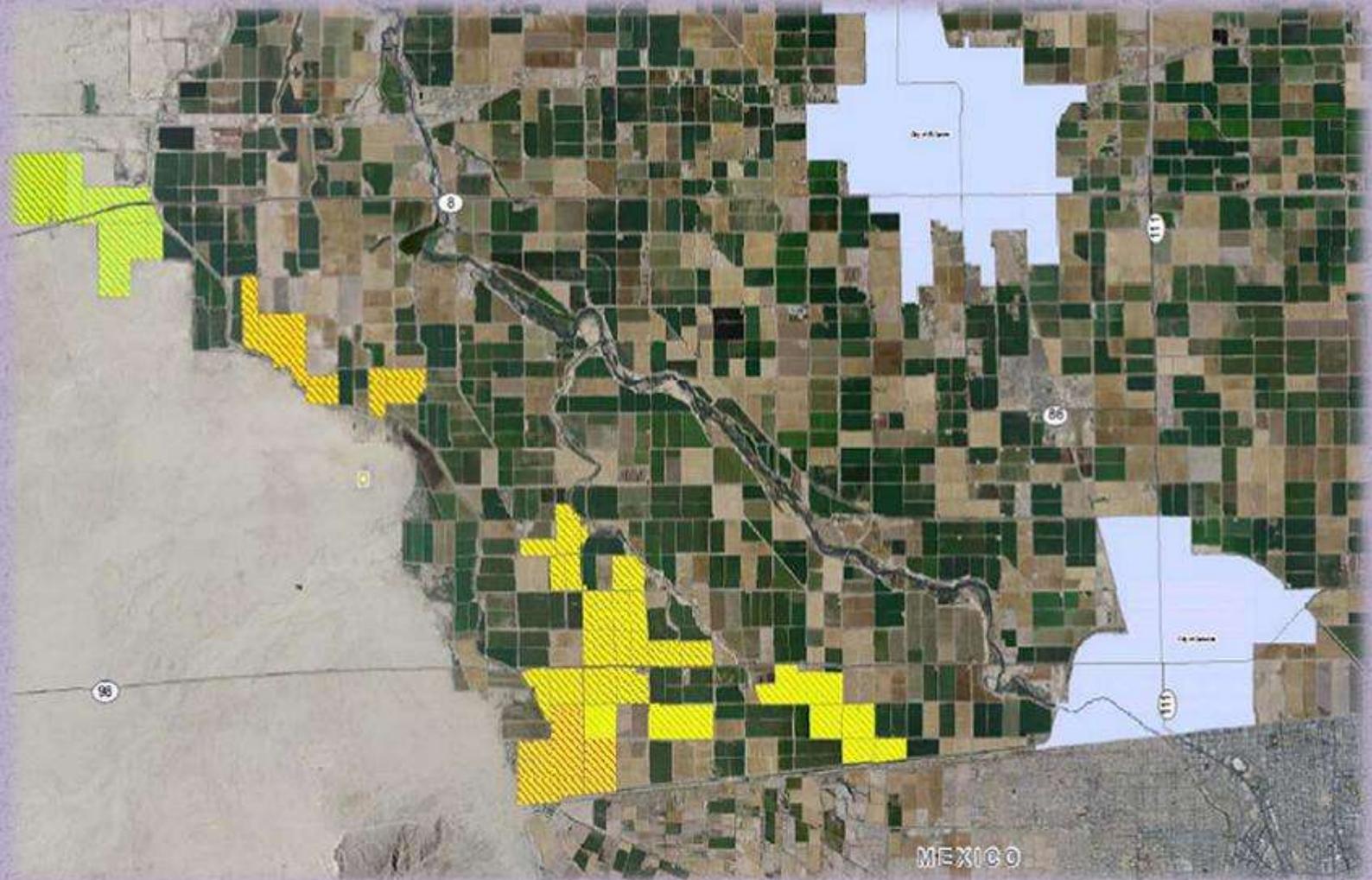
# Solar PV Energy

- 18 – # of Projects
- 2,050 – Total MW
- \$10 B – Capital Investment





# SOUTH IMPERIAL COUNTY



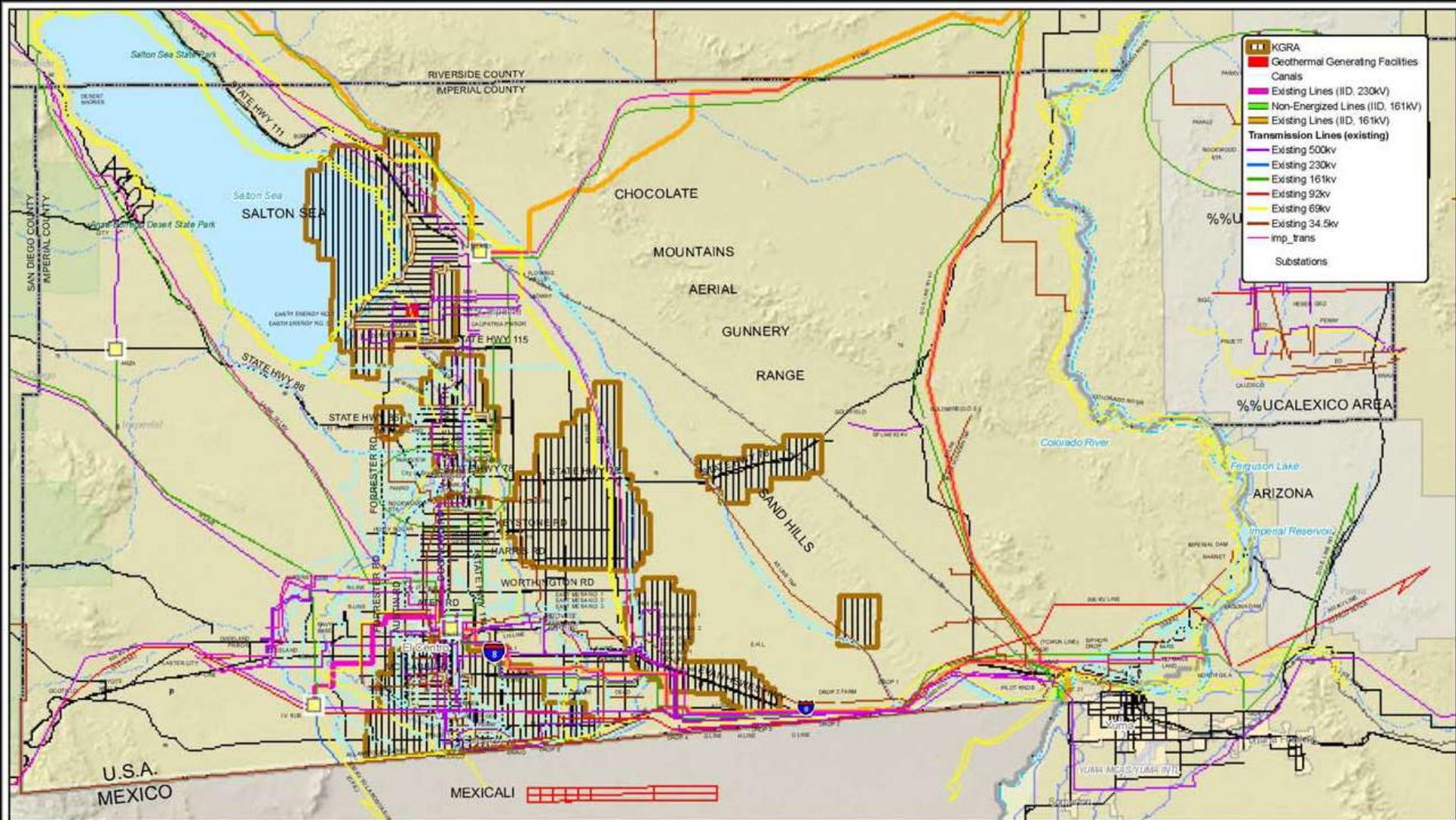
# Geothermal Energy

- 10 - # of New Projects
- 515 - Total MW
- \$3 B - Capital Investment
- 2nd largest geothermal energy producing county in the nation



\*Ormat Brawley North plant, August 2008

# KGRA's in Imperial County



# Wind Energy

- 2 - # of Projects
- 400 - Total MW
- 300 - Construction Jobs
- 75 - Operations & Maintenance Jobs
- \$1Billion + in Capital Investment



# Challenges

- Transmission
- Financing
- Water/Salton Sea
- Land Use
- Labor Issues
- Environmental/Cultural Resources





# Project Summary

- 117-mile electric transmission line, capable of delivering 1,000 megawatts of clean, reliable energy
- Project submitted in August 2005
- Approved by the CPUC and US BLM
- Final approval by USFS – July 2010
- \$1.883 billion project
- 2010 – Construction start
- Mid 2012 – In-service date



# IID 230 AND 161 KV BULK TRANSMISSION SYSTEM



- 500 KV
- 230 KV
- 161 KV
- 92 KV

# Questions

