

# RENEWABLE ENERGY AS ECONOMIC DEVELOPMENT CATALYST



Produced for:

Imperial Valley Economic Development Corporation  
Renewable Energy Summit

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# TOPICS

- History of Imperial Valley with Renewable Energy (last 10+ years)
- Review Case Studies of Economic Benefits:
  - Small Scale Solar
  - Large Scale Solar
  - Large Scale Wind
- State of Municipal Finance in California
- Keys to Continued Success in Imperial Valley

# DMG ECONOMICS PROJECT EXPERIENCE (RENEWABLES)

- Alhambra (Solar Gen 2) – PV
- Centinela – PV
- Cilion - Ethanol
- Edison Mission Energy – PV
- Liberty Energy – Bio
- Mt. Signal (8minutenergy) – PV
- Ocotillo (Pattern) – W
- Seville (Regenerate Power) – PV
- Silverleaf (Agile Energy) – PV
- Sonora (Solar Gen 2) – PV
- USS Mt. Signal (First Solar) – PV

# BACKGROUND

- 2006: County of Imperial / IVEDC Adopted a Regional Economic Development Strategic Plan
  - Food Processing
  - *Energy Generation*
  - Distribution/Warehousing/Distribution
  - Inbound Call Centers
  - Construction Materials
  - Specialized Manufacturing/Assembly
  - Tourism (Film)
  - Applied Biotechnology

# RENEWABLE PROJECTS IN IV

- In-Process/Approved/Built total:

- Approx 35 Projects

- Solar

- Wind

- Geothermal

- Ethanol

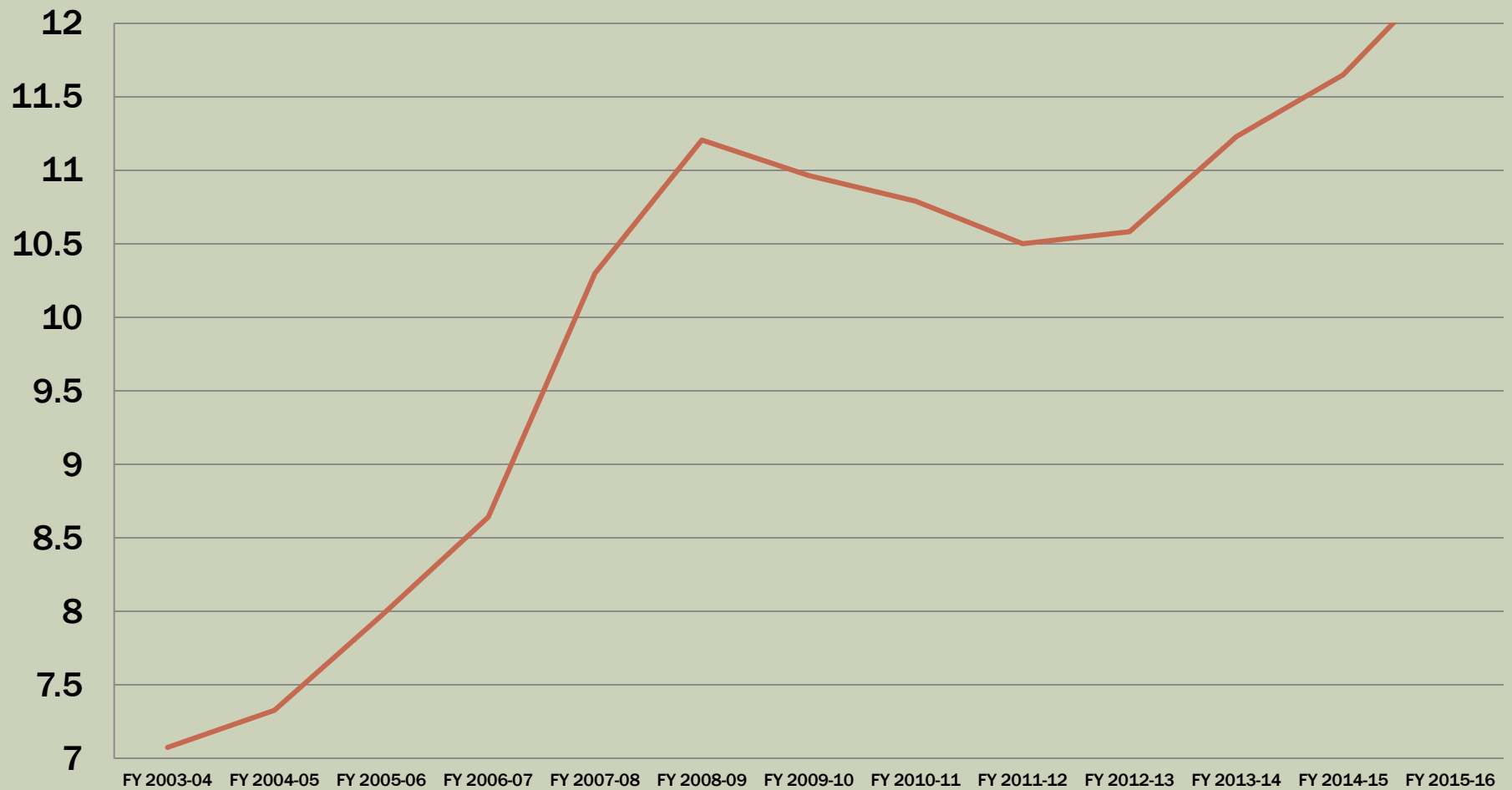
- 3,267 MW Generation

- 32,746 acres (1% of total County area)

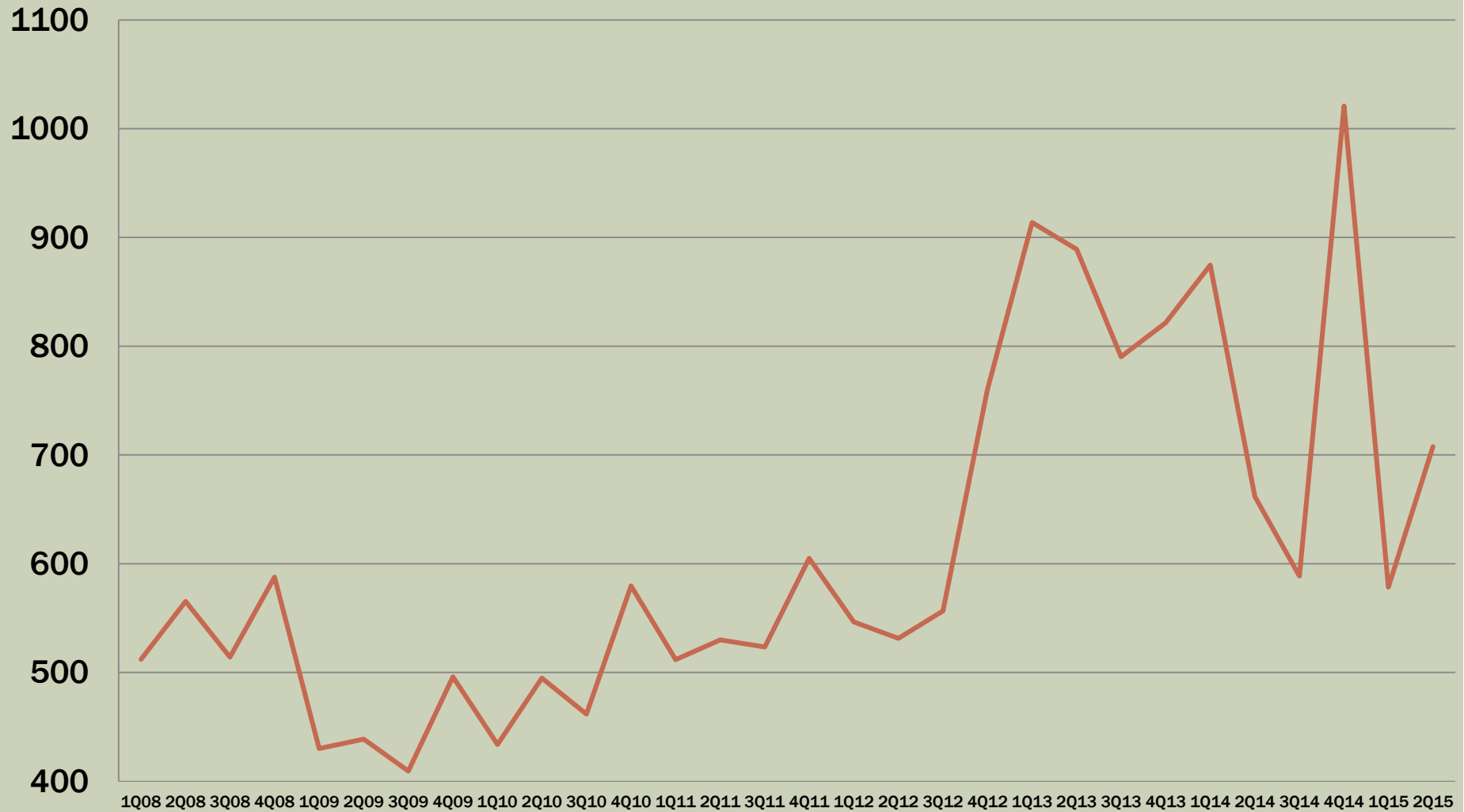
**\$7.0+ Billion of Economic Investment**



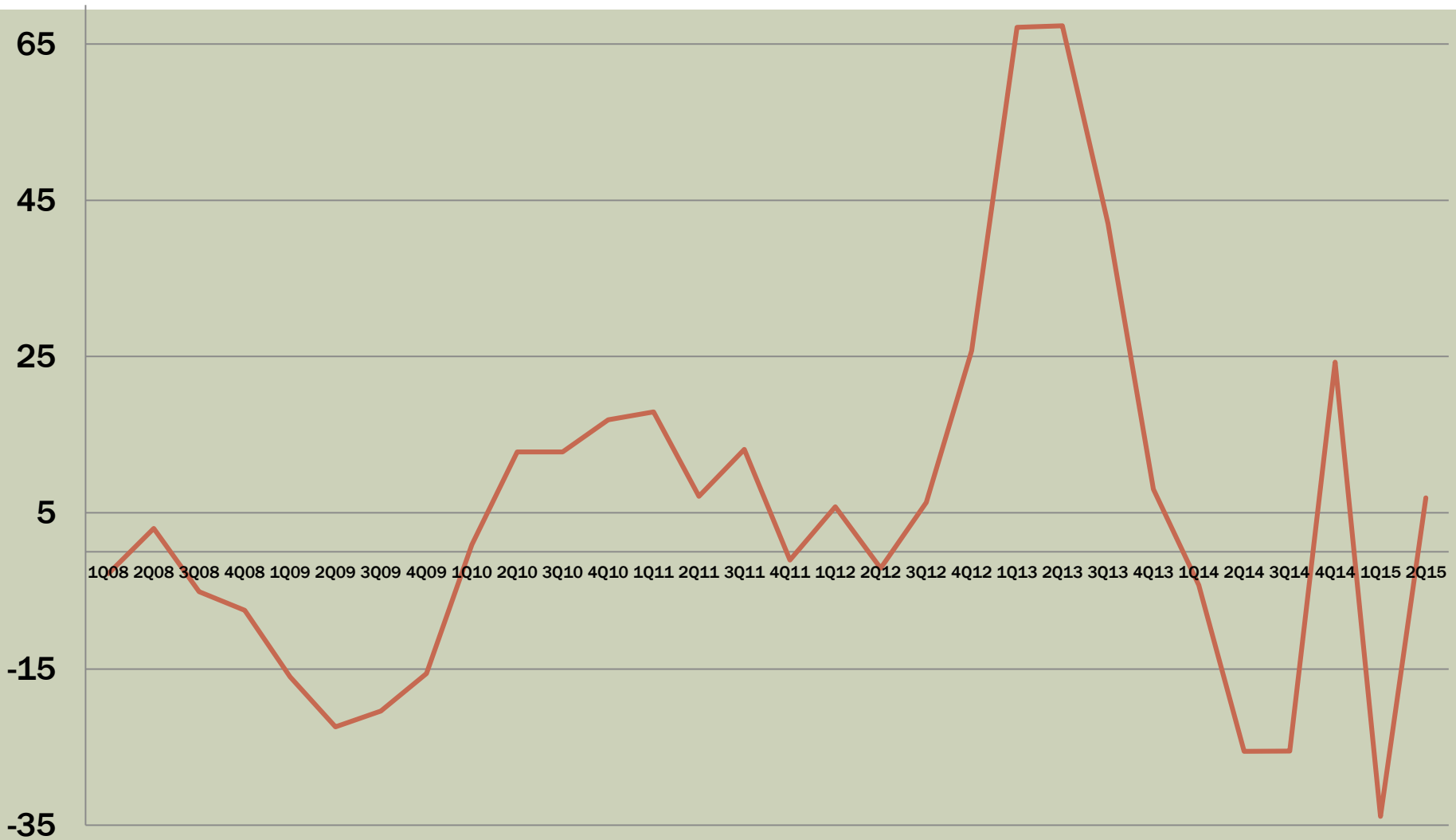
# TOTAL ASSESSED VALUATION (IN BILLIONS OF \$)



# TAXABLE SALES (IN MILLIONS OF \$)

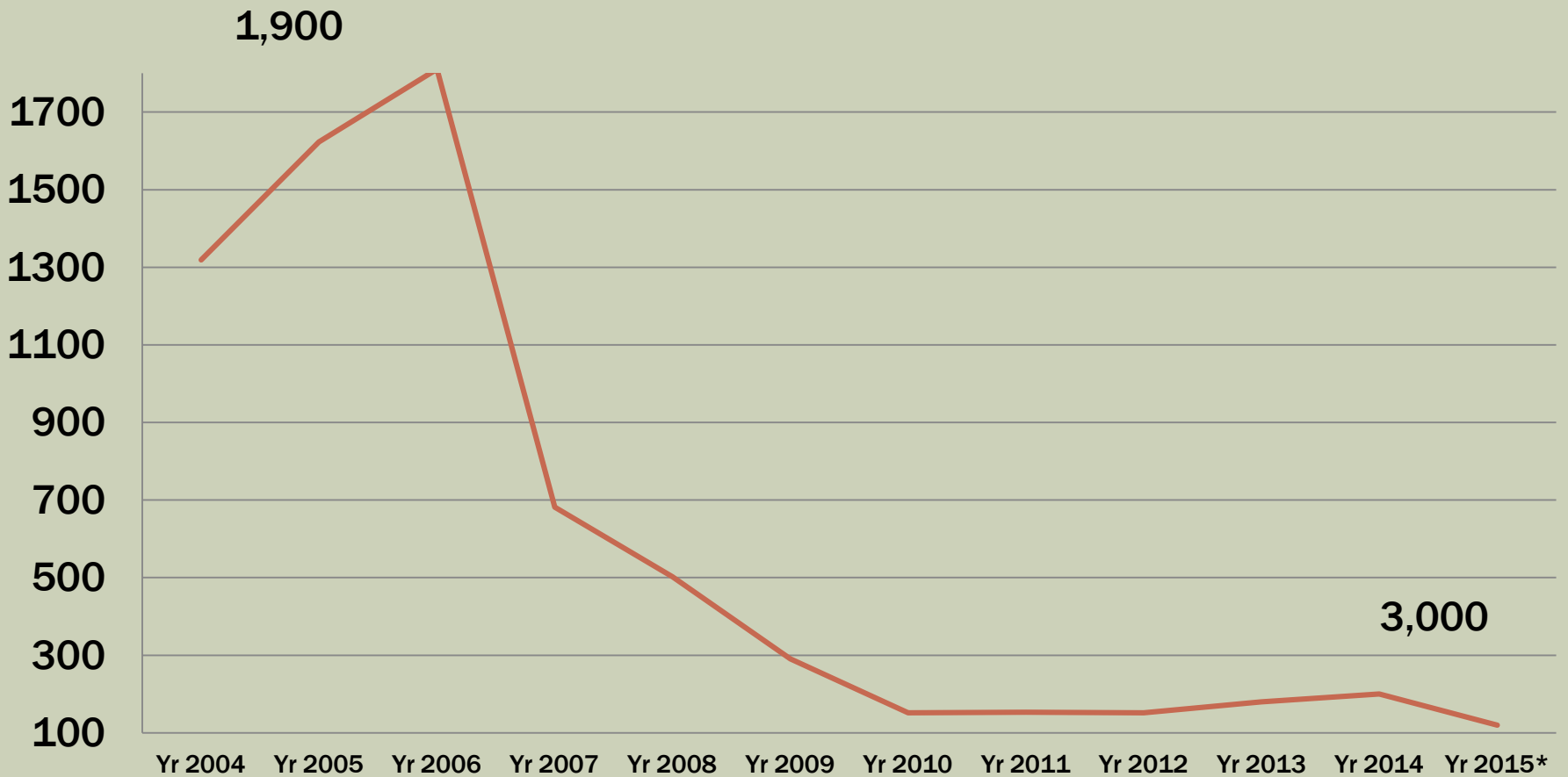


# PERCENT CHANGE IN TAXABLE SALES (SAME QUARTER, DIFFERENT YEAR)

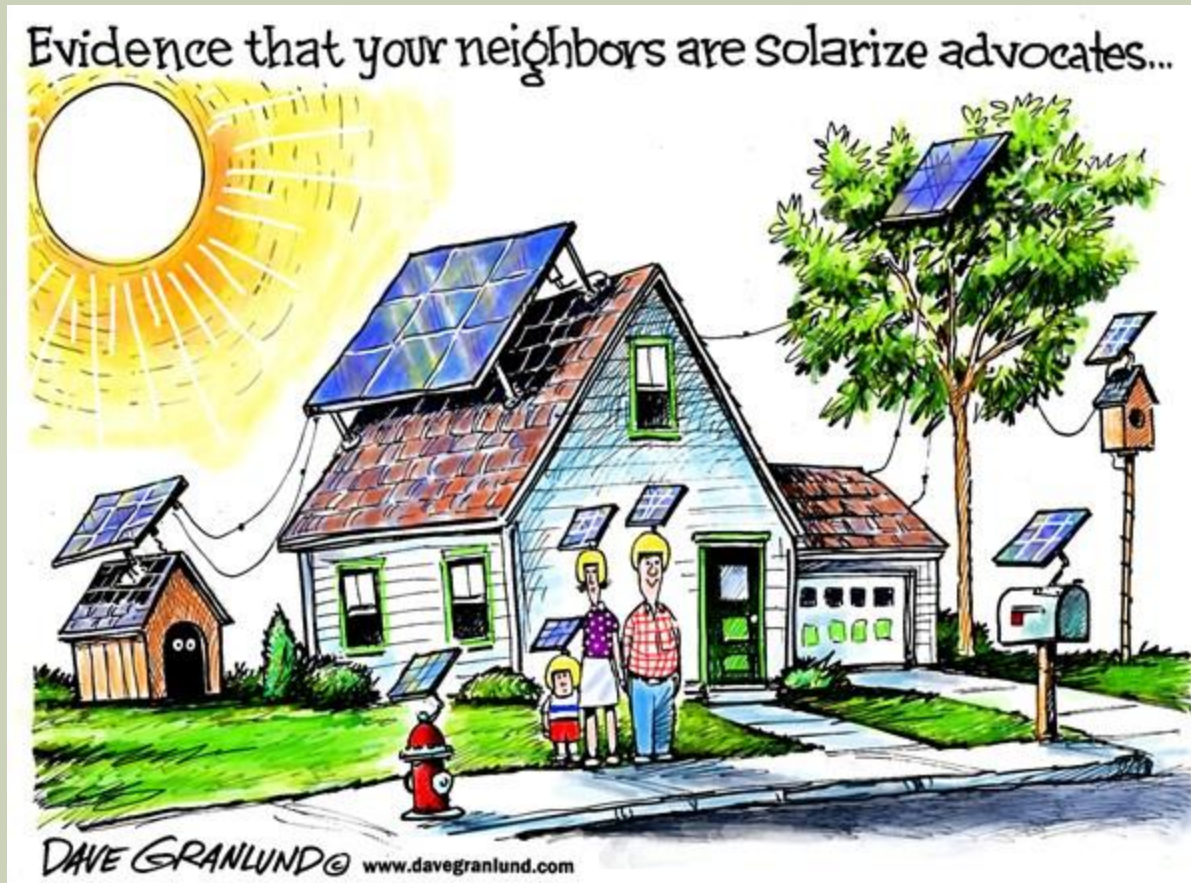




# NEW HOME CONSTRUCTION VS CONSTRUCTION JOBS



# ARE YOU A SOLAR ADVOCATE?



# CASE STUDY: SOLAR PV (SMALL) / 30 YRS

- Output: 5MW / 50 Acres
- Total Economic Impact: \$16.95 mm
- Construction Jobs: 10 FTE (9 months)
- Permanent Jobs: 1.15  
(operations/maintenance/security)
- Property Tax (Net to County): \$37k
- Sales & Use Tax (Net to County): \$179k
- Cost to Support (County): \$411k

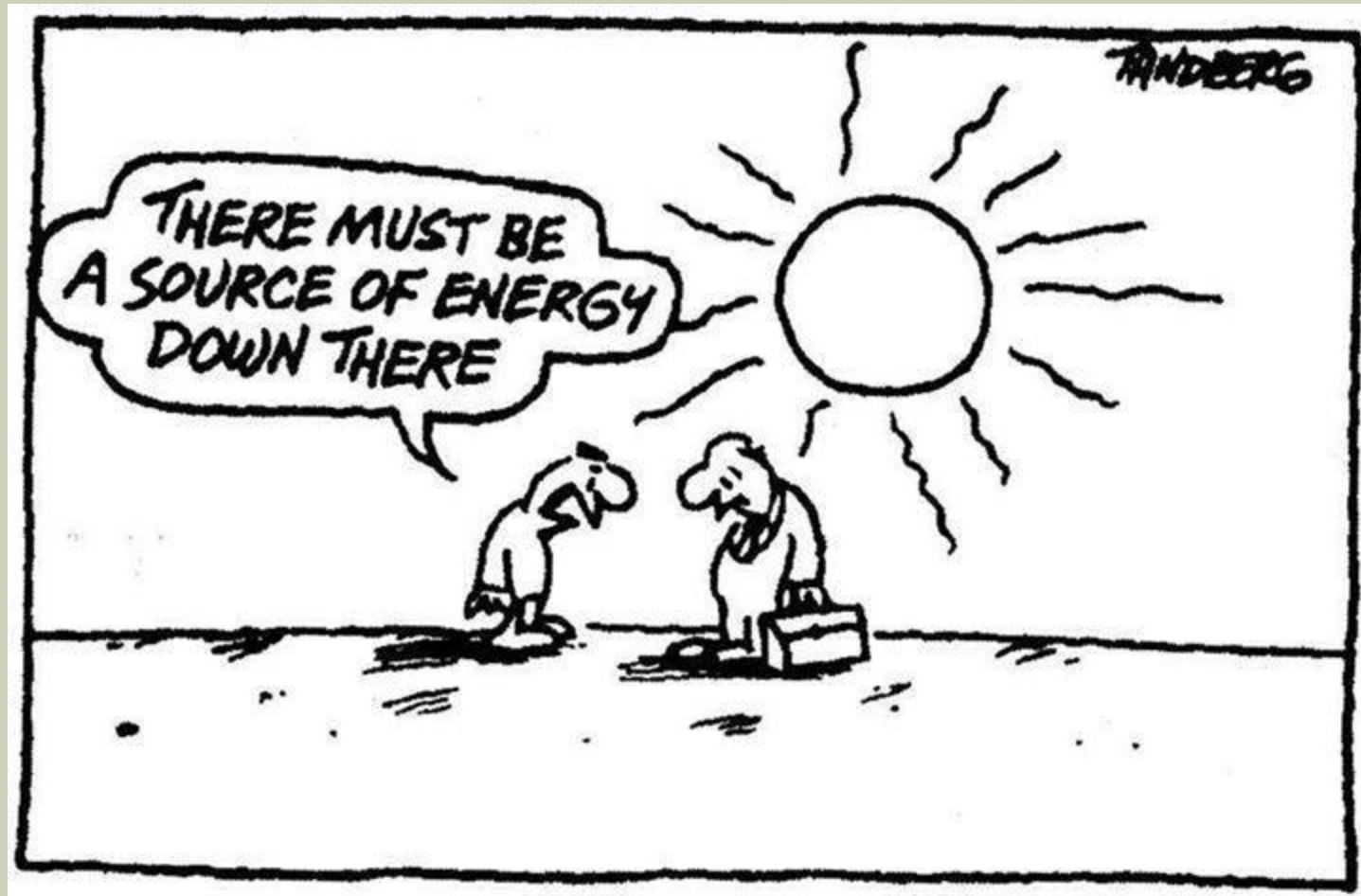
**Net Economic COST to County (as entity):  
\$194,000**

# CASE STUDY: MT SIGNAL PV (LARGE) / 30 YRS

- Output: 600MW / 3,800 Acres
- Total Economic Impact: \$1.01 B
- Construction Jobs: 300 FTE (36 months)
- Permanent Jobs: 30  
(operations/maintenance/security)
- Property Tax (Net to County): \$8.95 mm
- Sales & Use Tax (Net to County): \$26.48 mm
- Cost to Support (County): \$14.44 mm

**Net Economic Benefit to County (as entity):  
\$20.99 mm**

# HEAT FROM ABOVE, OR BELOW?

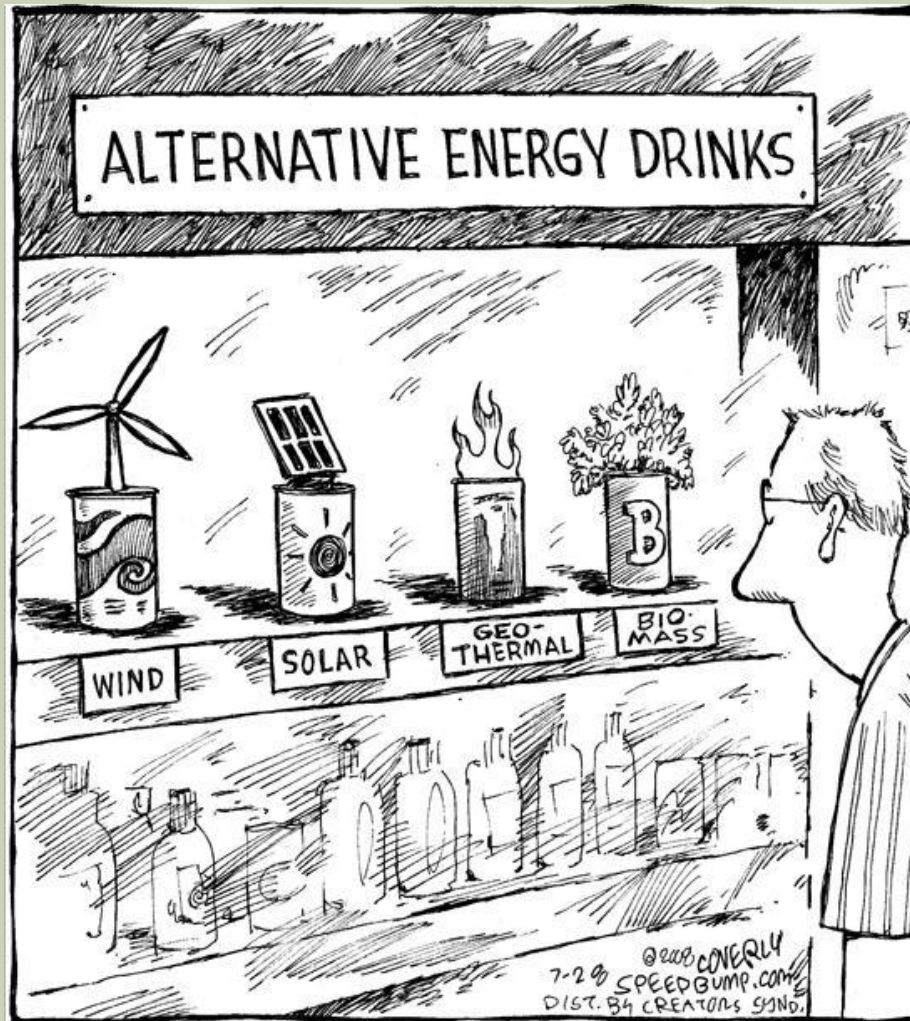


# CASE STUDY: GEO THERMAL / 30 YRS

- Output: 50MW / 50 Acres (1,000 underfoot)
- Construction Cost: \$400 mm
- Construction Jobs: 500+ FTE (36 months)
- Permanent Jobs: 50  
(operations/maintenance/security)
- Property Tax (Net to County): \$31 mm
- Sales & Use Tax (Net to County): \$5 mm

**Net Economic Benefit to County (as entity):  
\$20+ mm**

# WHO NEEDS GATORADE?



# CASE STUDY: OCOTILLO WIND / 30 YRS

- Output: 265MW / 12,000 Acres
- Total Economic Impact: \$442.5 mm
- Construction Jobs: 350 FTE (12-18 months)
- Permanent Jobs: 17  
(operations/maintenance/security)
- Property Tax (Net to County): \$48.89 mm
- Sales & Use Tax (Net to County): \$9.93 mm
- Cost to Support (County): \$8.45 mm

**Net Economic Benefit to County (as entity):  
\$50.37 mm**



# YOUR EXPECTATIONS

- Project approvals, complete plan check, issue permits, final project (needed for PPA's, financial closings and insurance)
- Roads to access your projects
- Police/Sheriff response in case of vandalism
- Fire response in case of equipment failure
- Responsiveness from paramedics if one of your team members gets hurt

**Government Services cost \$ in Imperial Valley,  
the same as where you live**

# REALITY OF MUNICIPAL FINANCE

- Cities and Counties throughout California are on a fast-track to BANKRUPTCY.
  - San Bernardino
  - Stockton
  - Vallejo
- Sacramento Continues to shift local tax revenue away from cities and counties
  - Proposition 13
  - ERAF #1
  - ERAF #2
  - Redevelopment (\$7 billion annual shift from local to state)
  - Section 73 Revenue & Taxation Code

# ECONOMIC DEVELOPMENT 101

*Economic Development is “any activity that raises the overall wealth of a community”*

- In California: cities and counties have land use jurisdiction
- Think of cities and counties as municipal corporations:
  - $\text{Income} = \text{Taxes} + \text{Fees}$
  - $\text{Expenses} = \text{Goods/Services to Residents}$

# FINAL THOUGHTS

- Imperial County Region has done its part to host renewable energy
- Projects **HAVE** generated some jobs, some tax \$
- Opportunities continue to exist if:
  - Avoid Farmland
  - Create Long-term Economic Benefit for Region
- PPA proposals should include appropriate economic remuneration to benefit your host communities
- Cities and Counties **ARE** exchanging information on true costs of hosting and such items as public benefit agreements

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