



The Asset Policy Forum Presents

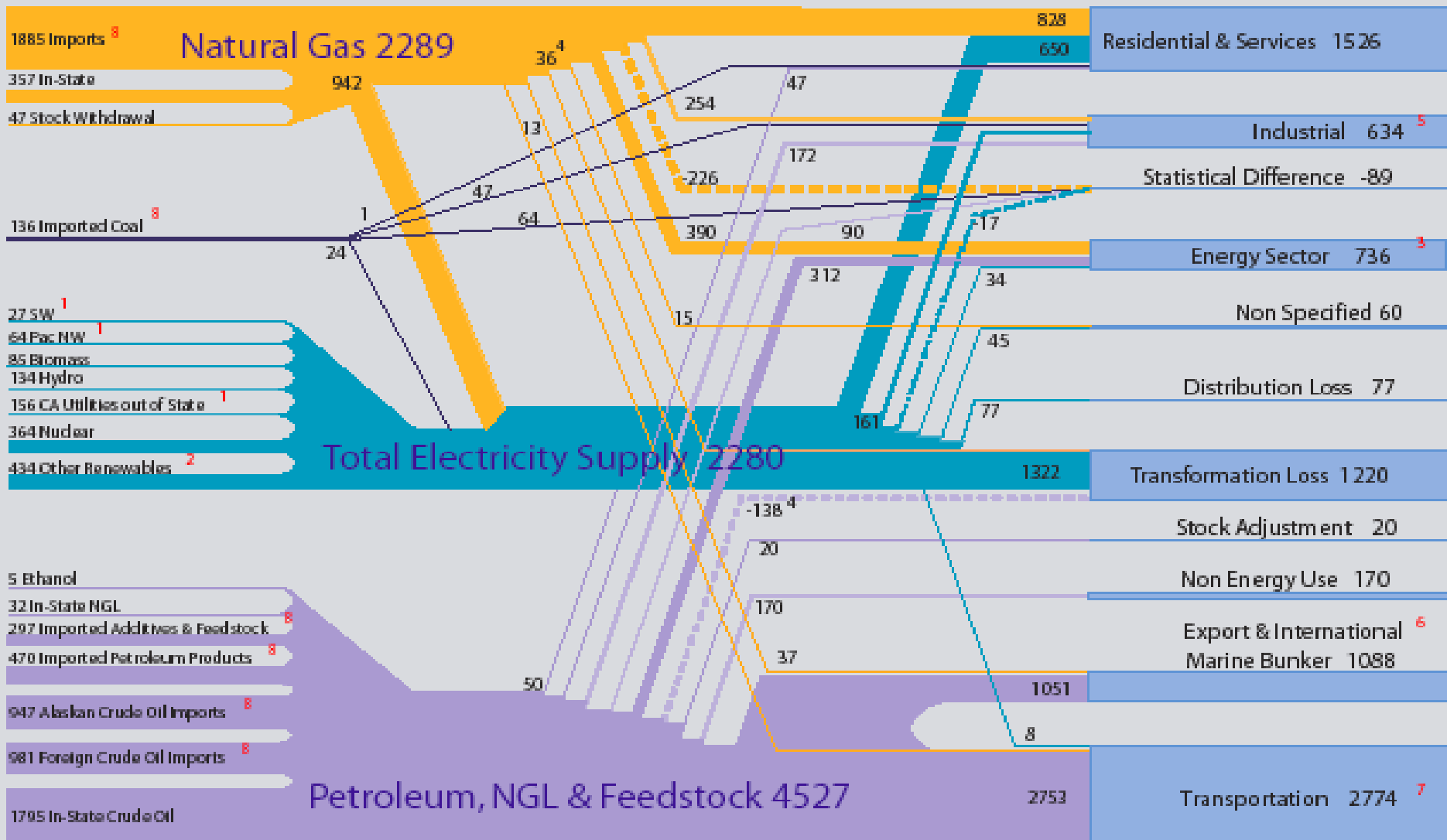
**Investing In *Green Assets* to
Build Energy Security
for California's Families**

Presented by

Lisa Margonelli, Irvine Fellow, New America Foundation

This event is also sponsored by the California Research Bureau

Green assets are opportunities for public investment that yield large social and environmental dividends.



- 1. Electricity flowing into the California Control Areas (CAISO, LADWP, and ID).
- 2. Other Renewables includes geothermal, wind, solar, land fill gas and municipal solid waste.
- 3. Energy used by oil refineries and for oil and gas extraction.
- 4. This signifies an unexplained transformation gain (energy output was greater than energy input).

- 5. Includes land uses agriculture and mining.
- 6. Following the International Energy Agency energy balance format, deliveries of fuel to ocean-going vessels with foreign destinations are reported separately from the transportation sector.
- 7. 220 Tbtu of fuel appearing in the transportation sector was used for international civil aviation.
- 8. "Imported" into California from interstate and/or international sources.
- ... Dotted lines are used for negative values which indicate instances where consumption is greater than production.

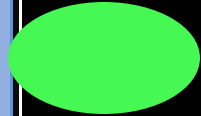
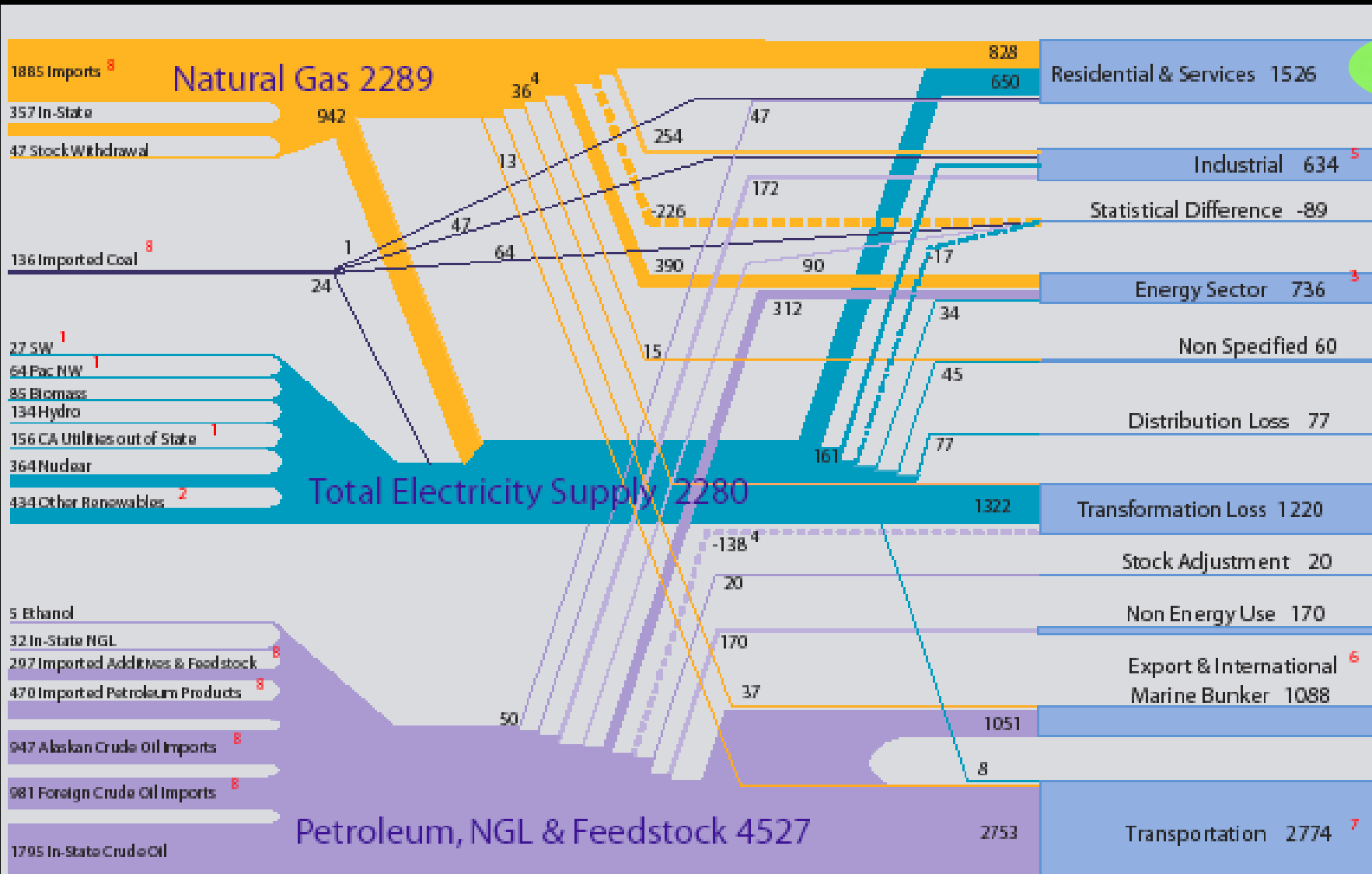
Source: California Energy Balances database (CALEB) using data from U.S. Energy Information Administration and California Energy Commission.

California Energy Flows in 2000, trillion Btu

Investing in energy efficiency can...

- reduce burden of energy costs
- reduce energy consumption
- reduce greenhouse gas emissions & pollution
- stimulate the economy/create jobs

Green Opportunities



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California Energy Flows in 2000, trillion Btu

California Wins !

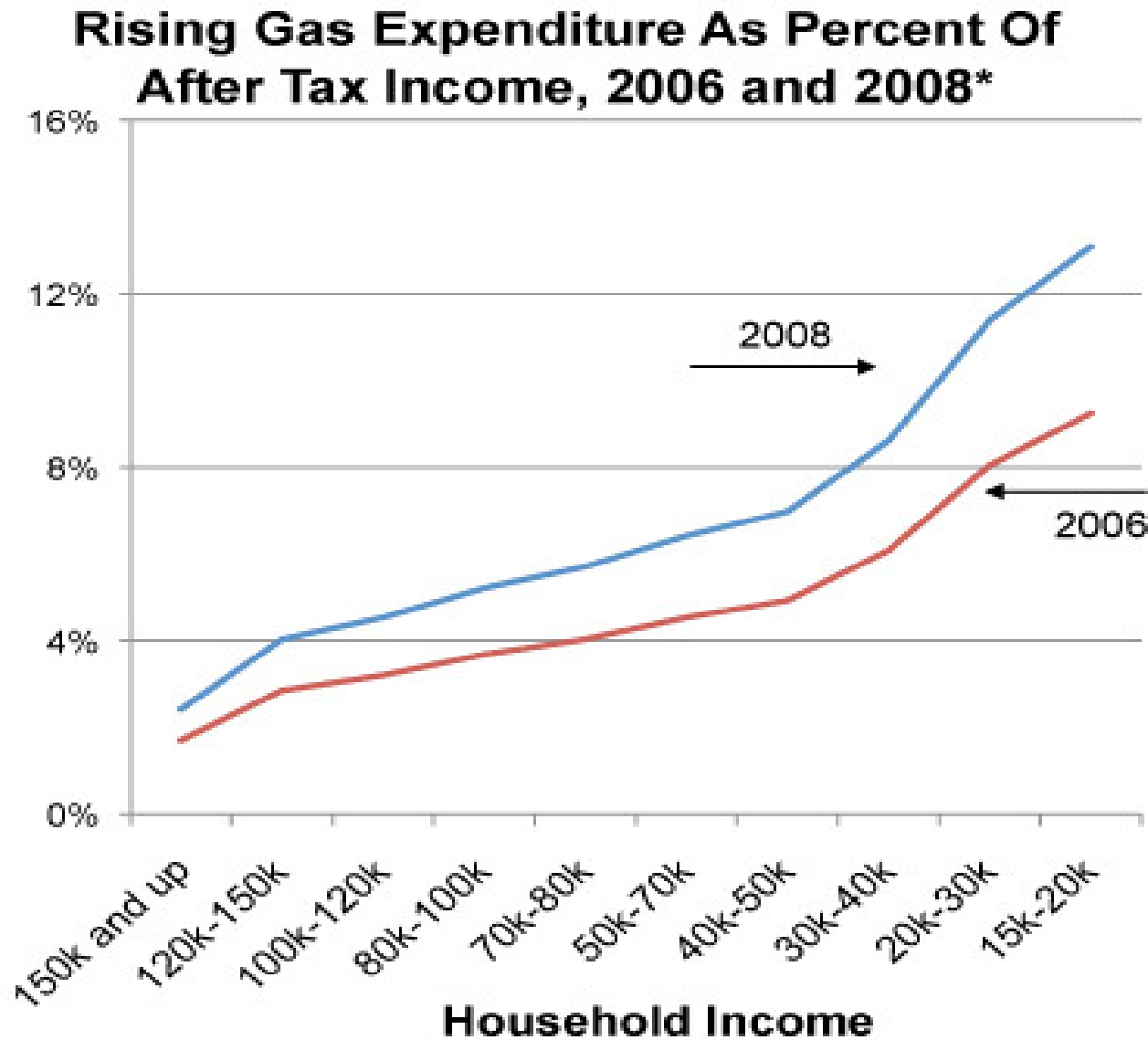
The CPUC estimates that every \$1 invested in efficiency returns \$2 to the State.

Since the 1970's they've created 1.5 million jobs, generating \$45 billion in earnings and \$56 billion in savings.

Median Family LA 2004-5

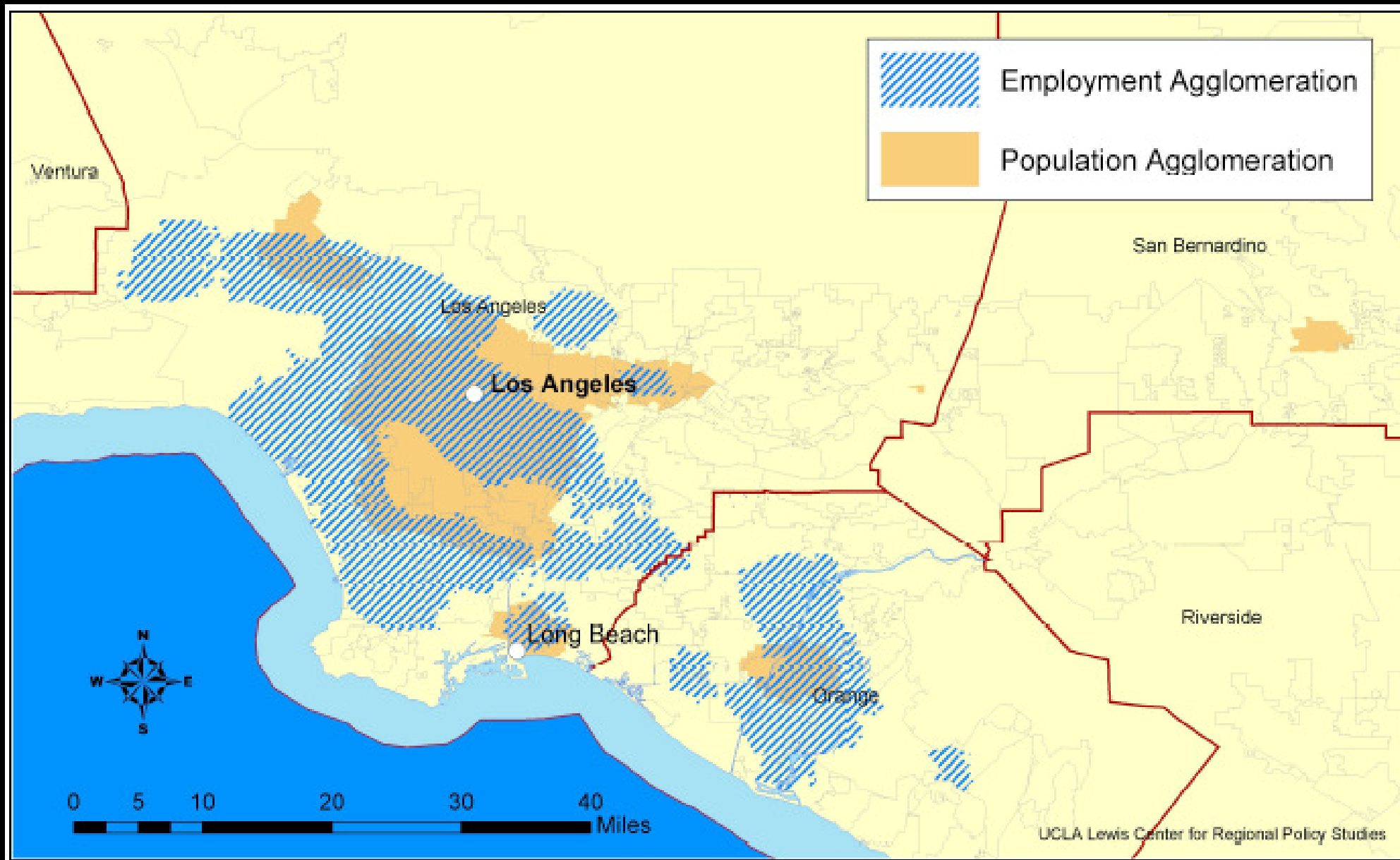
Income	\$65810
People	2.9
Cars	1.9
Housing	\$19,000
Utilities	2908
Transportation	10,972
Car	4996
Gasoline	2312
Public Transit	635
Other Car Expense	3000

CARS: The poor pay more...



* Estimates based on 2006 consumption figures.

Long Commutes



The Energy Trap

High Gas Prices

Cheap SUV's

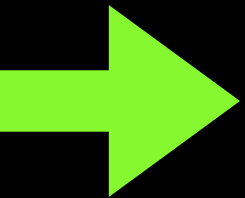
No Available Credit

People can't change cars or jobs or homes

Expensive commutes for moderate income families

How To Invest In Efficient Cars

\$65 m pledged for “crusher credits”



Very low interest state-backed loans

Throw in another incentive?

CARS are an Opportunity

Average Household will Save:

353 gallons of gas/year or \$1235 (if gas is \$3.50 a gallon)
6883 pounds of CO₂,
nearly 50 lbs hydrocarbons,
23 lbs nitrogen oxides

5 million cars =

1.8 billion gallons of gas, \$6.3 billion saved,
17 million tons of CO₂

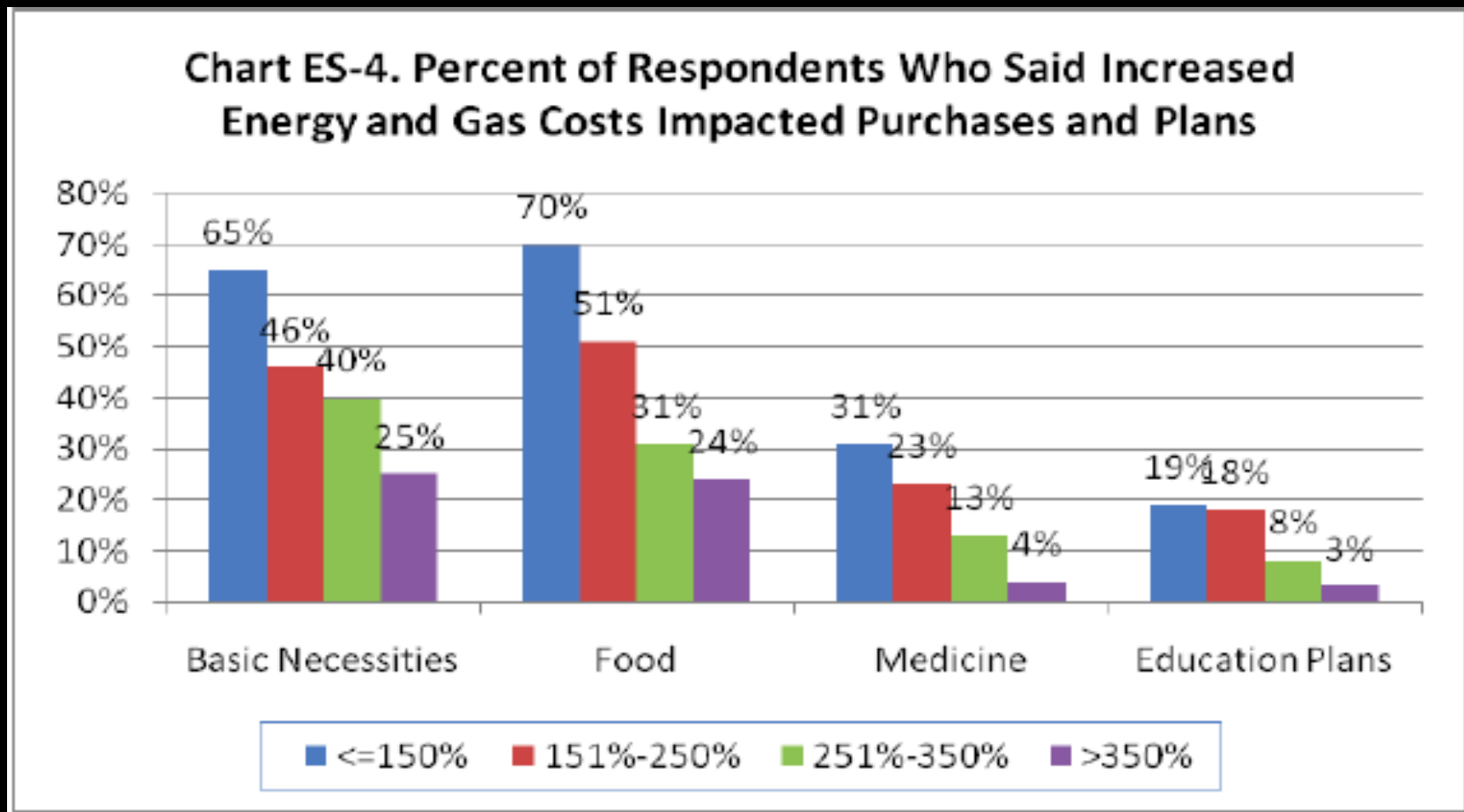
HOMES are another....

One third of California households are at 200 percent of the poverty level or below.

In 2006, only 2-4 percent of them were reached by utility efficiency programs.

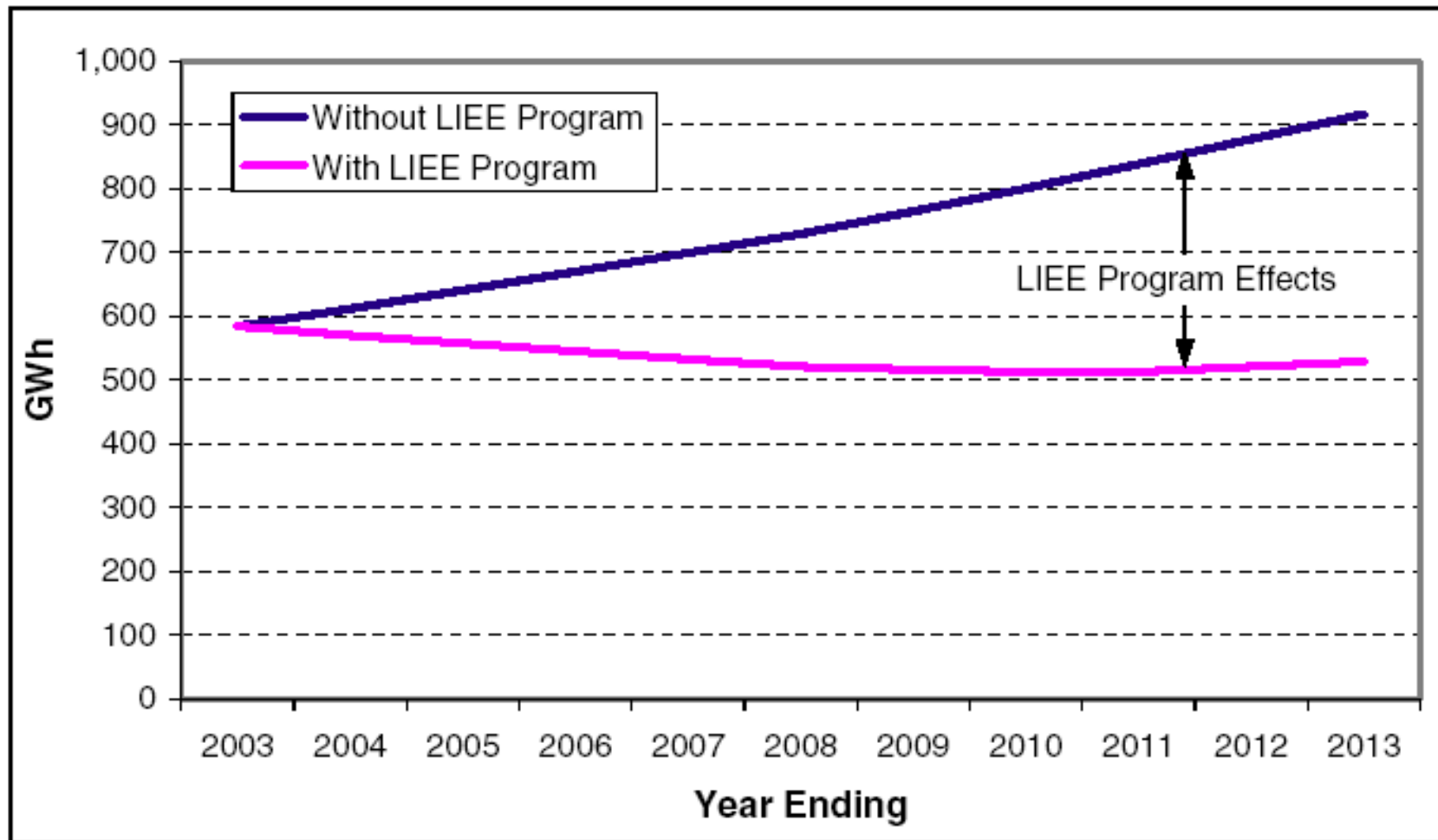
Poorer Households Pay More

Money and worry: Low and moderate income pay more per square foot for heating and cooling



Reservoir of Green

Low Income Electricity Savings Potential



Solar Hot Water Heaters

Cheaper than solar PV--\$2000-\$6000



Jobs
(safety equipment)

Savings: \$200-500/year

Could reduce
California's natural gas
use by 5.2 %

6.8 million tons CO₂

Investing In Homes

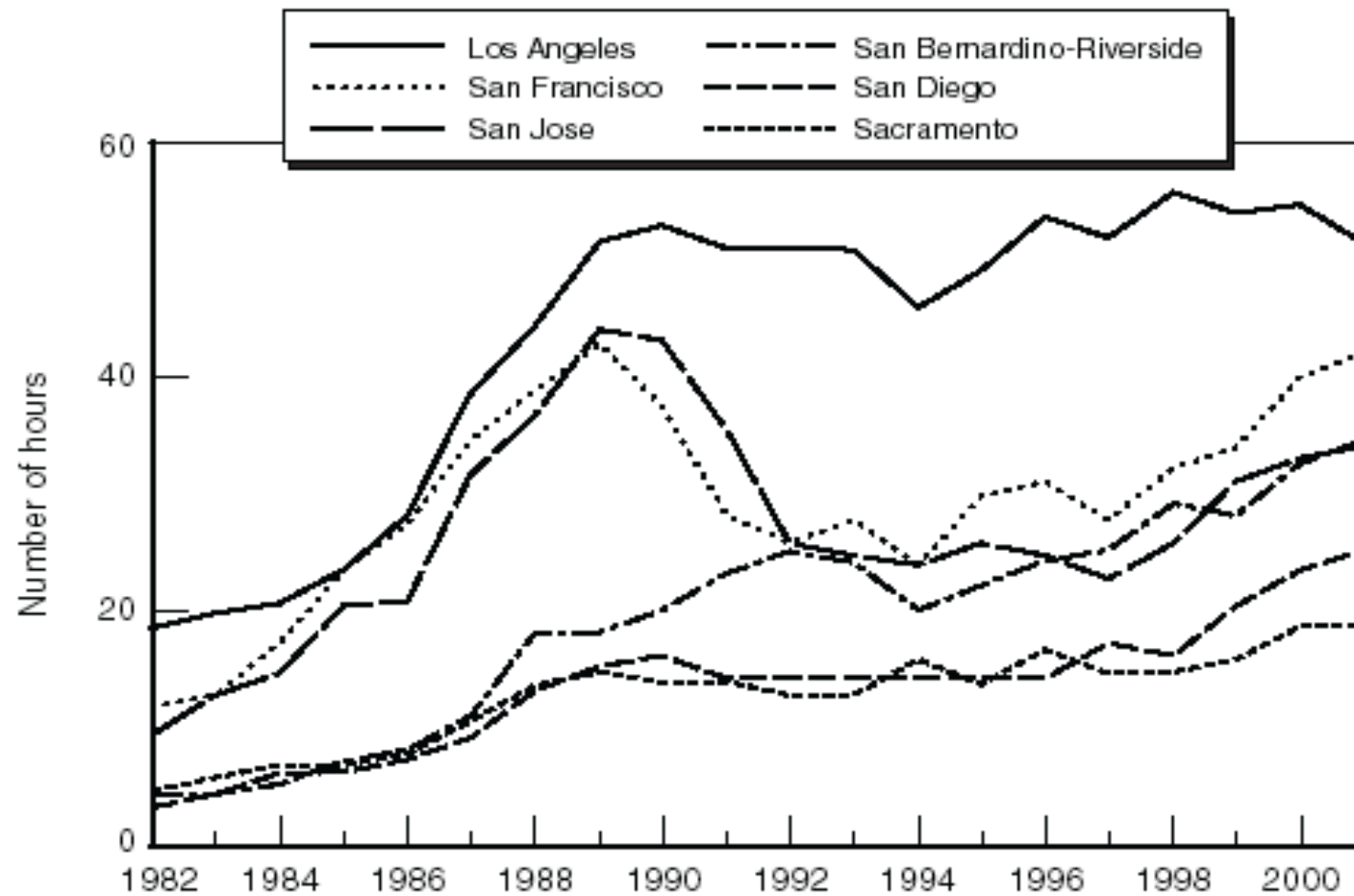
Energy efficient mortgages & home equity loans at low or 0%

Make upgrades part of refinancing/new homes/ section 8

Offer direct vouchers/green credit cards to home owners

Jobs: DOE estimates 52 jobs created for every \$1 million spent on weatherization.

TRAFFIC is also an Opportunity



SOURCE: Texas Transportation Institute (2003).

Figure 5.6—Annual Hours of Delay per Person on Highways and Major Arterials in California Metropolitan Areas, 1982–2001

THE POSSIBILITIES:

Reward people who leave cars home with vouchers

Encourage flexible profitable transit--carpools, vanpools

Possible to carpool with cellphone, gps, facebook?

What if WalMart and other big boxes ran employee vanpools?

Informal taxis, zipcars, community cars?

Everyone on board a greener California

Help working families overcome market failures to invest in energy efficiency

Strengthen their budgets while strengthening the grid

Create jobs and stimulate the economy

Empower them to fight global warming and pollution

Energy Security for American Families

Lisa Margonelli, Margonelli@newamerica.net

Is Cool Air California's moonshot?

Central Valley population is growing rapidly

Electric infrastructure is already stressed

Air conditioning is 30 percent of peak loads

Vicious, Very Un-green Cycle

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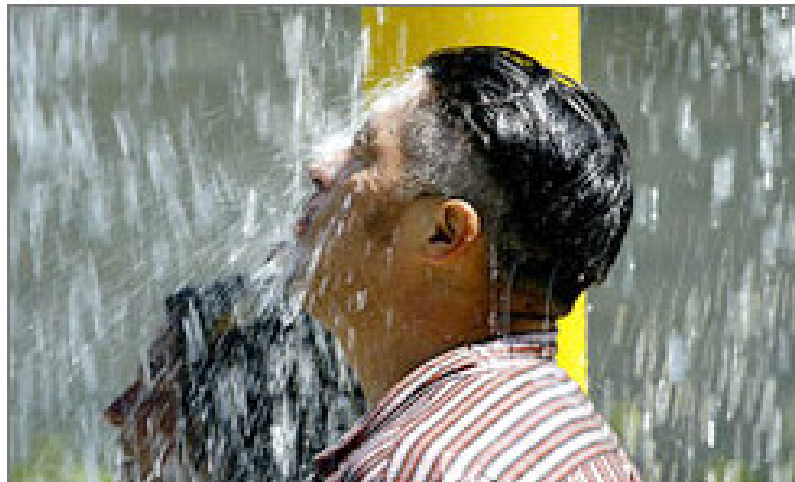


Provided by



141 deaths later, heat wave appears over

Updated 7/29/2006 12:54 AM ET

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By Dan Ocampo, The Bakersfield Californian via AP

Josh Tores soaks himself at the water park Thursday with several of his friends at Jefferson Park in Bakersfield, Calif., during the 13th consecutive day of triple-digit heat.

FRESNO, Calif. (AP) — The state appeared to break out of its nearly two-week heat wave Friday, but not before it caused as many as 141 deaths and did untold damage to crops.

Authorities raised their toll of possibly heat-related deaths by more than 40 on Friday. The big increase came primarily from Los Angeles County and the Central Valley counties of Merced and Stanislaus, where coroners struggled to keep up.

Stanislaus County, which includes Modesto, has reported 29 heat-related deaths. It normally sees just one such death a year, county emergency services spokesman David Jones said.

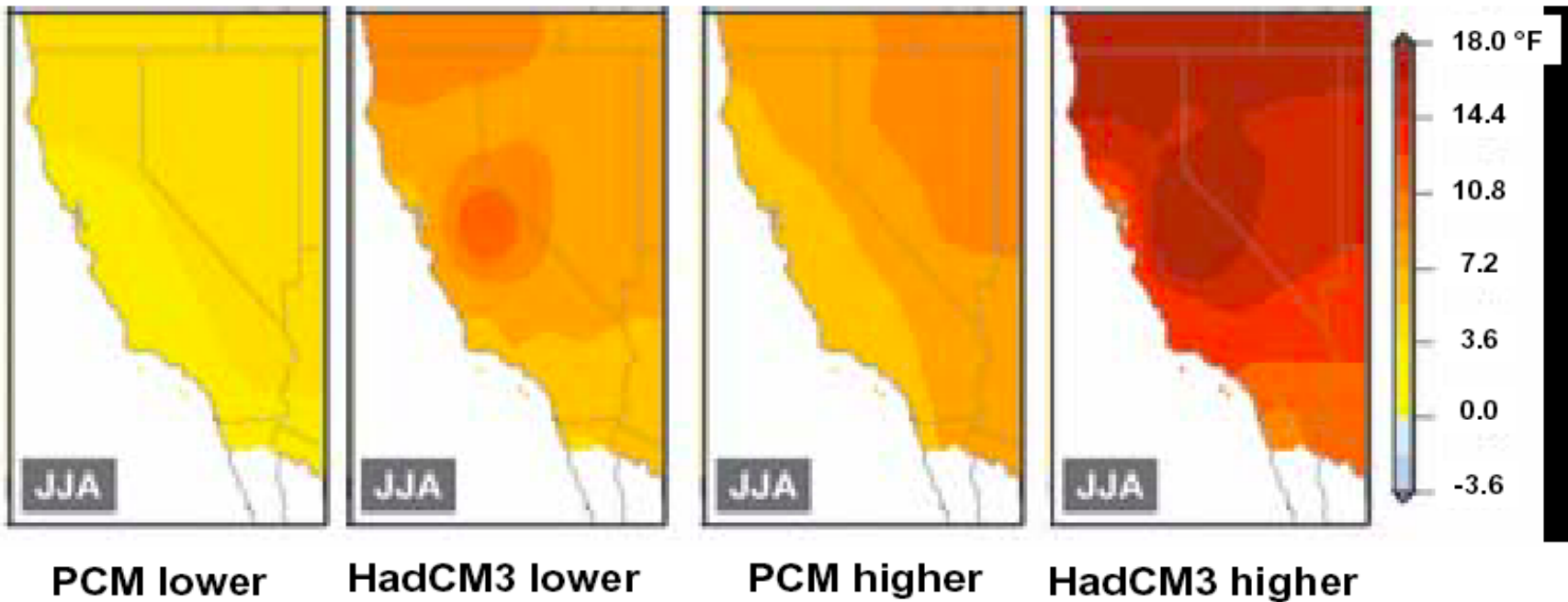
VIDEO: [Dozens of heat-related deaths in Calif.](#)

Warming Trend

Spatial Pattern of Summer Temperature Change 2070-2099 relative to 1961-1990

LOWER EMISSIONS

HIGHER EMISSIONS



POSSIBILITIES!!:

Design non-electric AC or AC that works like a battery

Save money, Save energy, Save the grid, Save lives!

Create industry and jobs

Time for a “California AC X-Prize?”





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