

The Local Story

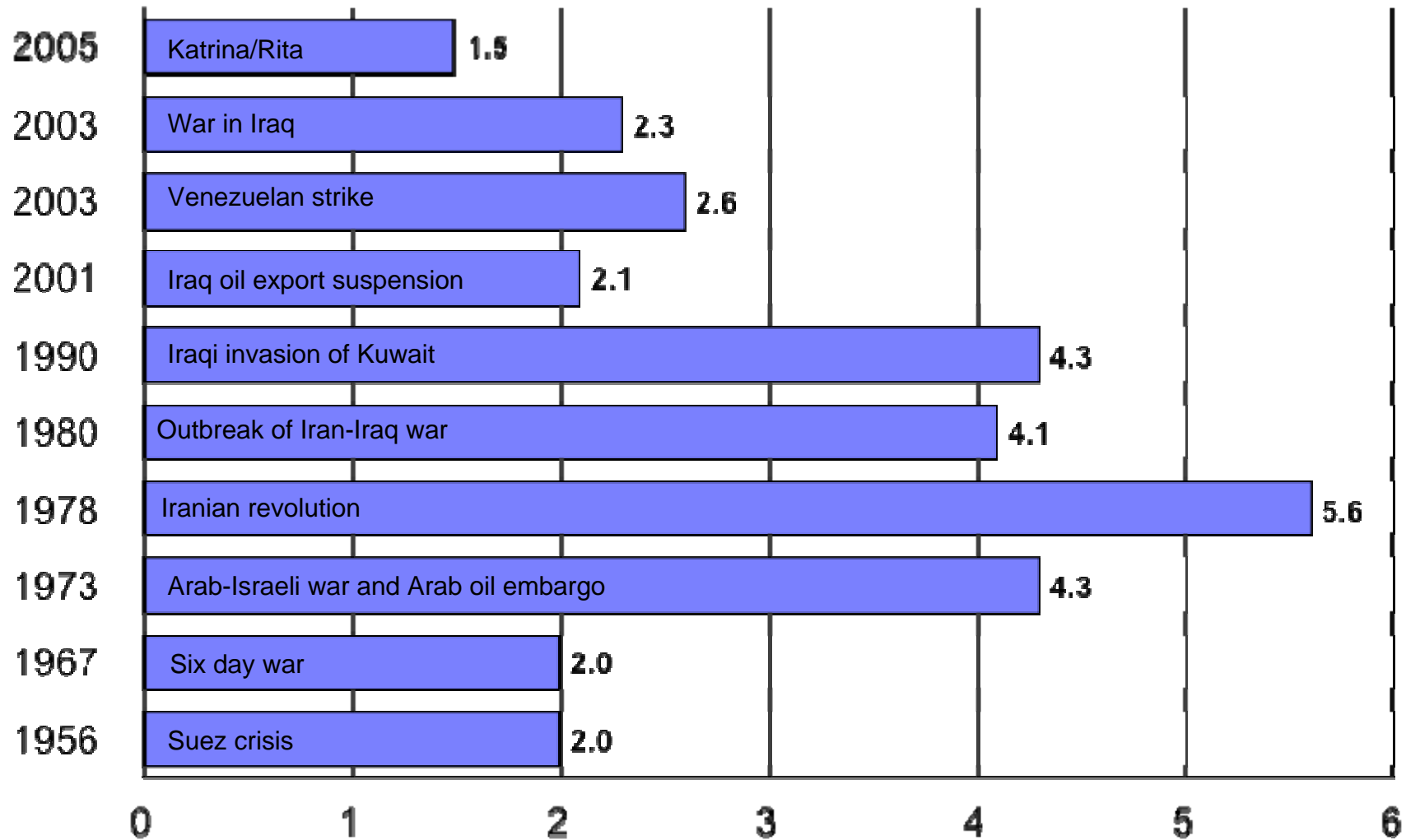
Presented by Debbie Cook
October 19, 2007
ASPO Houston

***“Americans have to be hit
over the head with a 2 x 4.”***

Dr. James Schlesinger



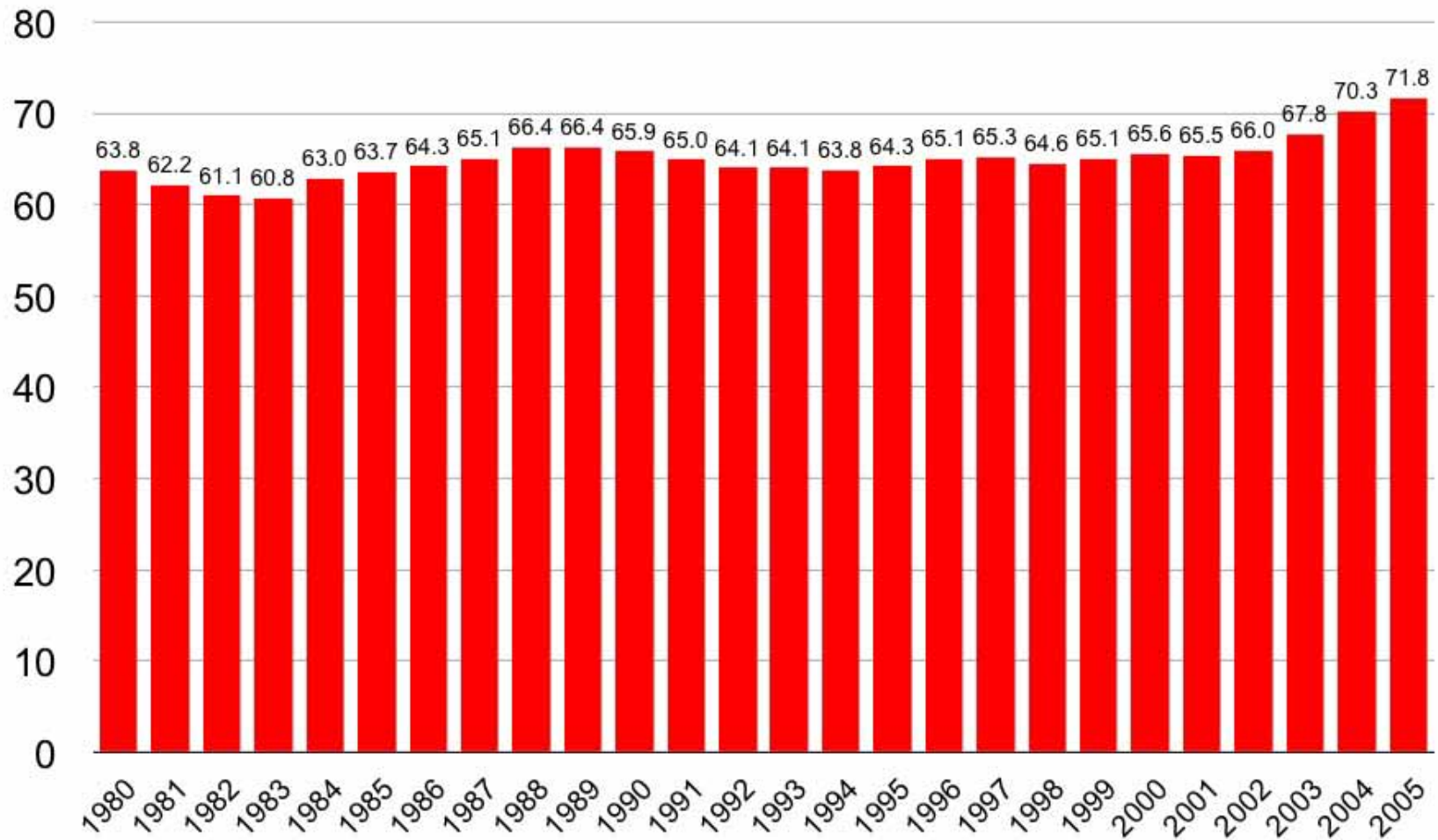
Major world oil supply disruptions



Source: IEA Response System for Oil Supply Emergencies

Gross peak supply loss (mb/d)

World Per Capita Energy Consumption (mbtu)



Source: EIA

Our decision about energy will test the character of the American People.



CALIFORNIA VOTES

RECALL GOVERNOR DAVIS?



YES

NO





PROPOSED EARLY ACTIONS TO MITIGATE CLIMATE CHANGE IN CALIFORNIA



April 20, 2007

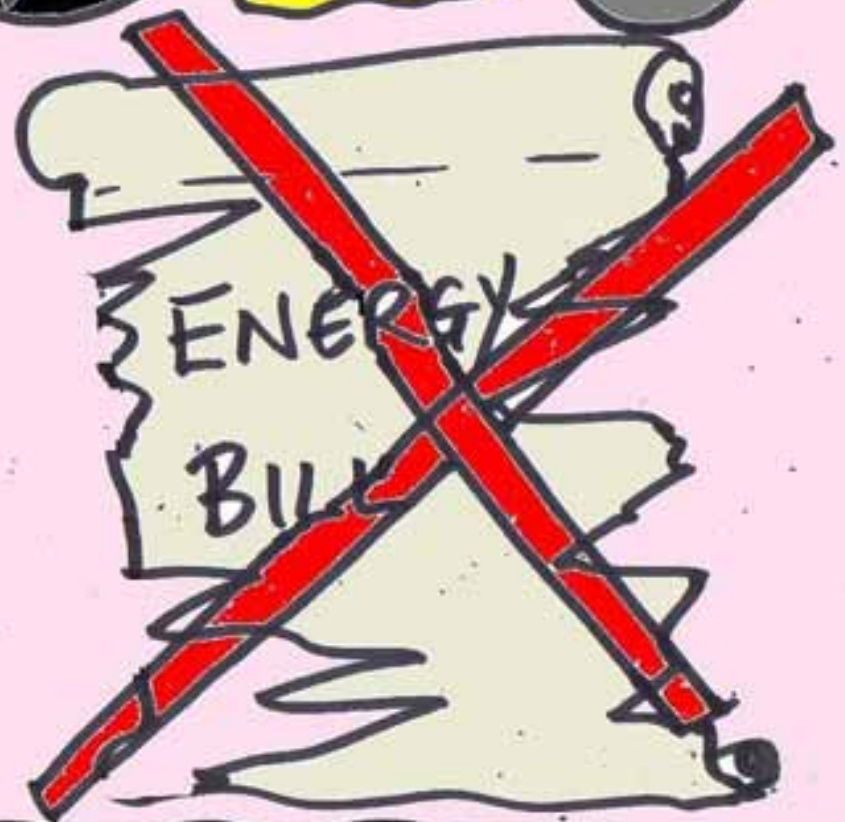


The real question is:

Can we govern ourselves?



LINDSEY GRAHAM
6.17.07





Climate Change and Energy Taskforce Final Report

A Call for Action

Brisbane City Council

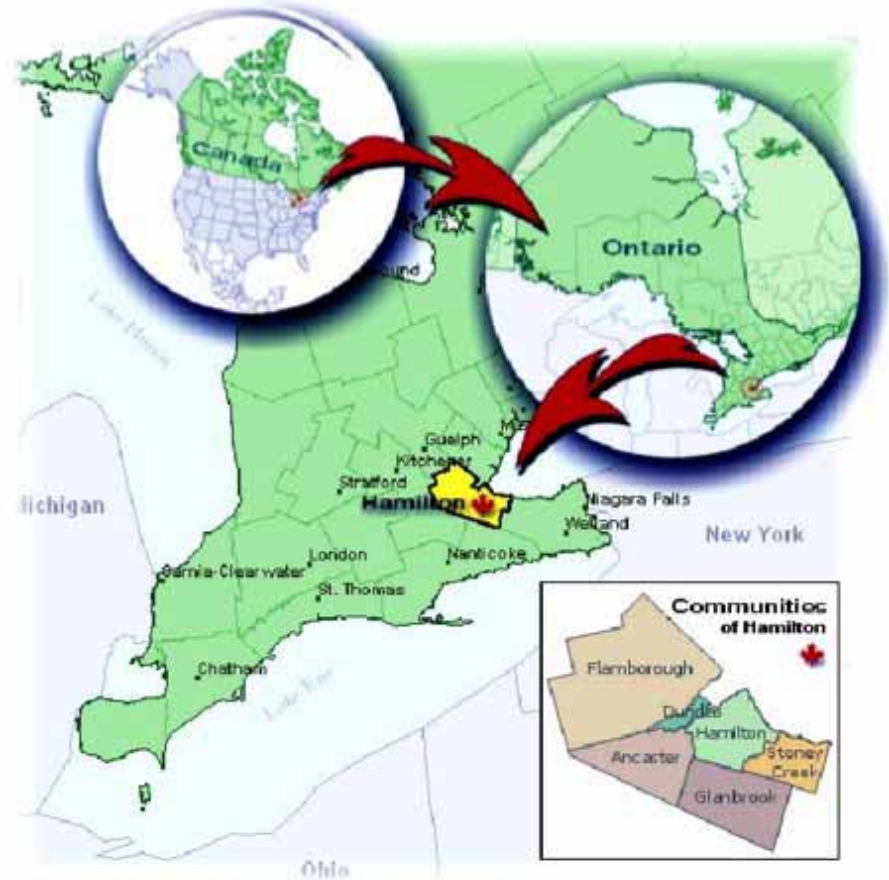
12 March 2007



Brisbane, Australia

HAMILTON: THE ELECTRIC CITY

April 13, 2006



This report has been written for the City of Hamilton. Richard Gilbert wrote the report helped by Julie McGuire. Al Cormier and Brian Hollingworth provided input. Richard Gilbert is entirely responsible for the contents. Enquiries should be addressed to richardgilbert@sympatico.ca.

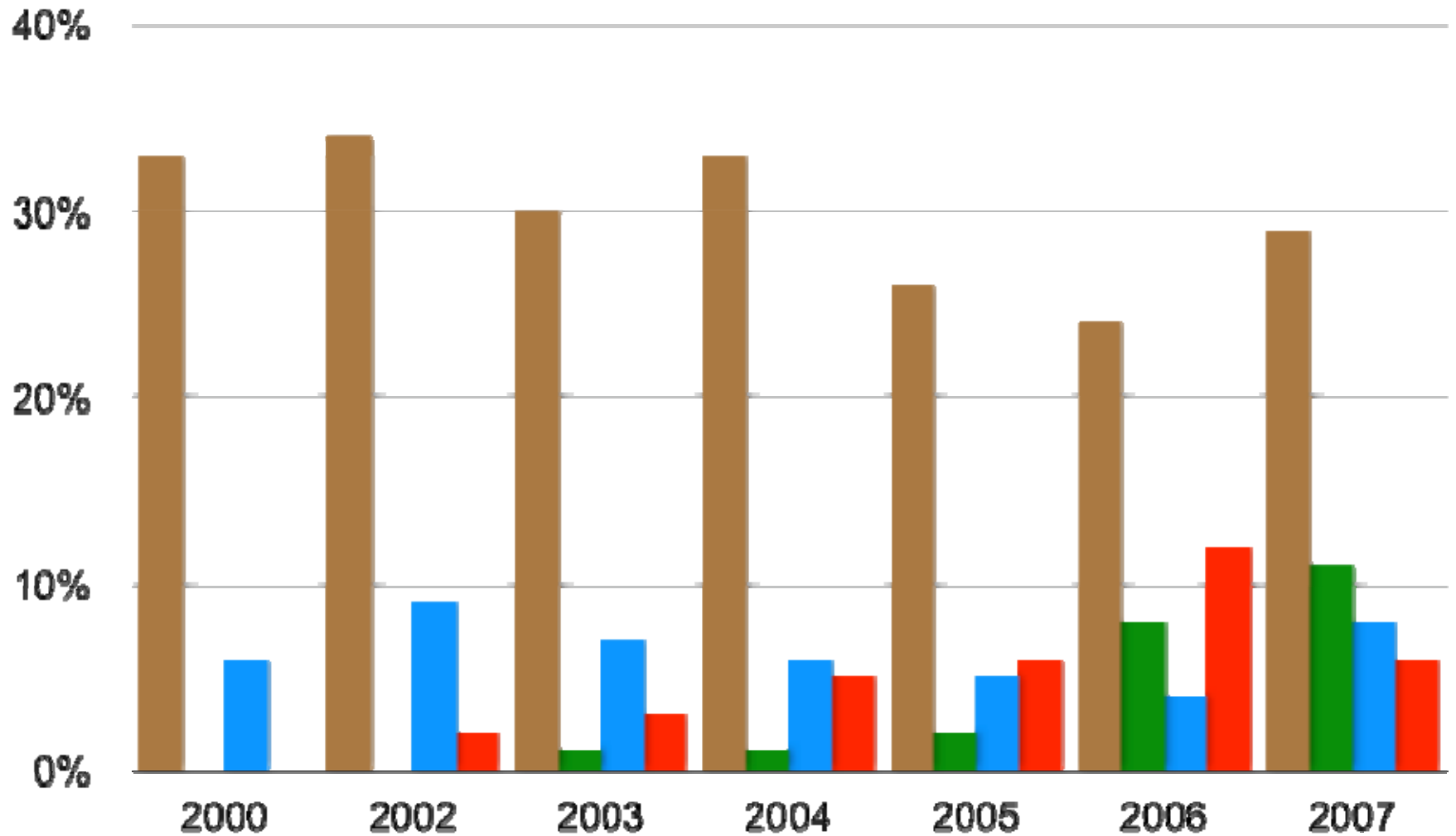
Hamilton, Canada



Statewide Survey:

Most Important Environmental Issue Facing California

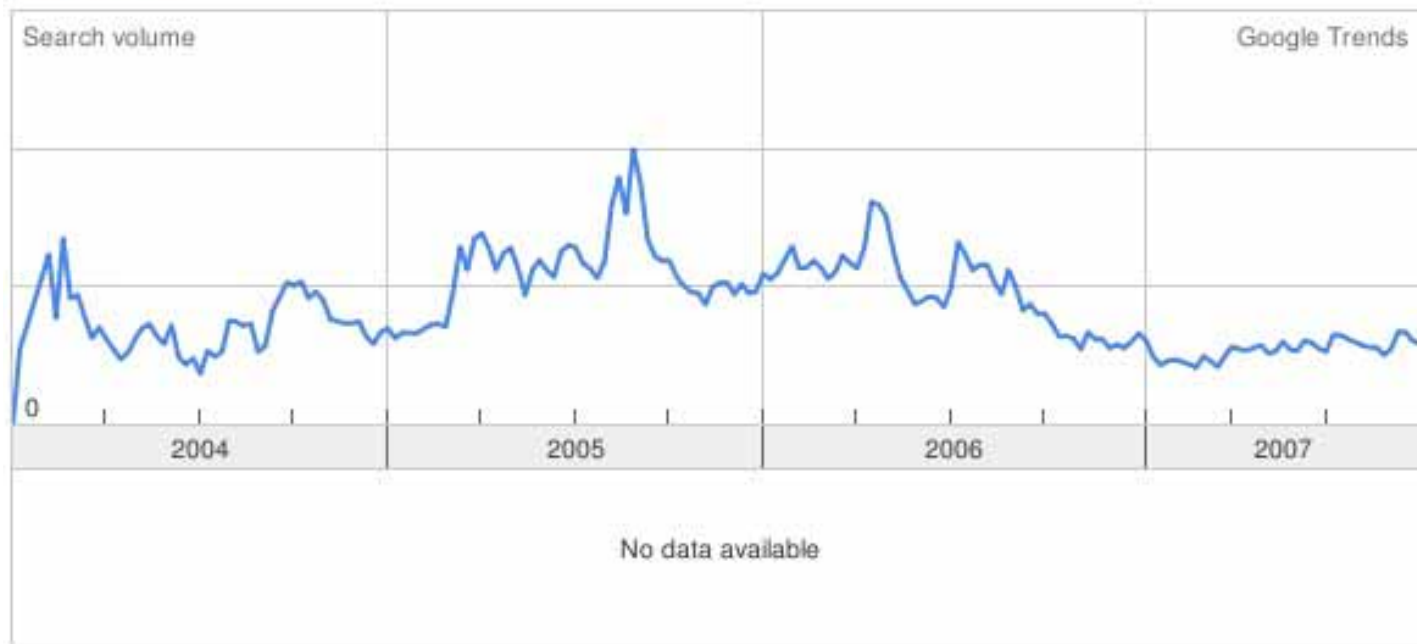
Air Pollution **Global Warming** **Water Supply** **Energy**



Source: Public Policy Institute of California

Trend history

● "peak oil"



No news articles we

All regions

All years

Regions

1. [New Zealand](#)
2. [Australia](#)
3. [United States](#)
4. [Canada](#)
5. [Sweden](#)
6. [United Kingdom](#)
7. [Netherlands](#)
8. [Germany](#)
9. [France](#)

Cities

1. [Portland, OR, USA](#)
2. [Seattle, WA, USA](#)
3. [Austin, TX, USA](#)
4. [San Francisco, CA, USA](#)
5. [Vancouver, Canada](#)
6. [Pleasanton, CA, USA](#)
7. [Denver, CO, USA](#)
8. [Auckland, New Zealand](#)
9. [Brisbane, Australia](#)
10. [Minneapolis, MN, USA](#)

How many times does the term “peak oil” appear in an article in the *Oregonian*?

127

How many times does the term “peak oil” appear in an article of the *Los Angeles Times*?

Zero

by far the most terrifying film
you will ever see.

an inconvenient truth

A GLOBAL WARNING

now playing in select theaters

PARAMOUNT PICTURES

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Trend history

● "global warming"



All regions

All years

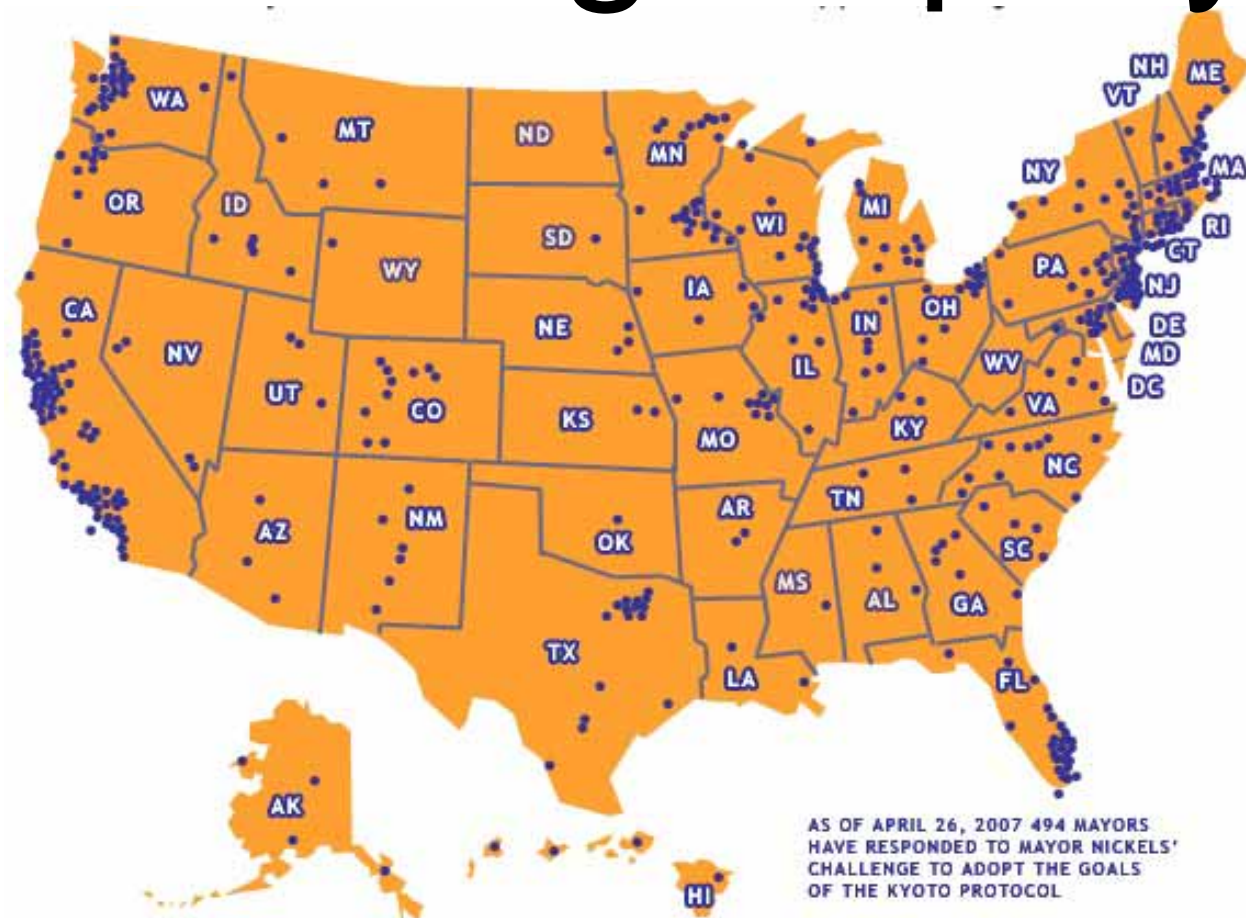
Regions

1. [Philippines](#)
2. [Australia](#)
3. [New Zealand](#)
4. [India](#)
5. [Canada](#)
6. [United States](#)
7. [United Kingdom](#)
8. [Germany](#)

Cities

1. **Delhi**, India
2. **Brisbane**, Australia
3. **Auckland**, New Zealand
4. **Melbourne**, Australia
5. **Sydney**, Australia
6. **Washington, DC**, USA
7. **Toronto**, Canada
8. **Los Angeles**, CA, USA
9. **Seattle**, WA, USA
10. **San Francisco**, CA, USA

Local Government Action Growing Rapidly



<http://www.seattle.gov/mayor/climate>

As of September 11: 691 Mayors (104 in California)
over 200 added since March

An alternative framework.

Your Money

Higher Utility Bills Face Homeowners

By Marianne Lavelle
Posted September 23, 2007

Despite the pleasant early autumn weather warming much of the country, sky-high heating costs are in store this winter and many of the nation's households are in the grips of a home energy crisis, says a coalition of state officials, the AARP, and the nation's natural gas utilities. The group is calling on the Bush administration to release \$1.5 billion in federal emergency assistance funds to help poor households.



(Peter Dazeley/Photograph Choice/Getty Images)

1.2 million US households were disconnected from electric and natural gas service this summer due to failure to pay utility bills...

Most of the funds in this emergency pool will disappear under the program enacted by Congress, if they are not released by September 30. Some 1.2 million U.S. households were disconnected from electric and natural gas service this summer due to failure to pay utility bills, says the National Energy Assistance Directors' Association. The average delinquent utility bill is \$90, a sum that typically must be paid before a home can be reconnected for the winter.

Heating oil and propane costs this winter will be up 28 percent over last year, NAEDA projects, with the average heating bill for homes using those fuels ranging from \$1,700 to \$1,800. That's roughly double the average cost of heating a house from 2000 to 2005. Natural gas and electricity costs also are expected to be up 6 to 7 percent this year, with the average winter heating bill at about \$880. "These record prices will place a significant burden on low- and moderate-income families this winter," says Mark Wolfe, director of NAEDA. "We are calling on the administration...to help poor families pay for the first tank of fuel as well as cover outstanding arrearages from high cooling costs this summer."

Huntington Beach, CA

An aerial photograph of Huntington Beach, California. The image shows a wide sandy beach on the left, with waves breaking onto the shore. A multi-lane highway runs parallel to the beach. Inland from the highway is a large, modern resort complex with several large buildings featuring prominent red-tiled roofs. The resort is surrounded by greenery and includes a tennis court. Further inland, a dense residential area with many houses is visible. The sky is clear and blue.

- **27 sq. miles**
- **200,000 residents**
- **1100 employees**
- **8.5 miles of beach**



Electricity:
Natural Gas:



\$4,000,000
\$1,000,000



City Services:
495,000 gallons of
fuel per year:

@\$3/gal: \$1,500,000
@\$4/gal: \$2,000,000



Infrastructure

500 miles of roads.

Sewage

365,000 kwh/day

Trash

4500 tons of trash per week.

Waste Management:
525,000 gallons of fuel
per year.

Water

10% of California's
electricity production
consumed in moving
water.

Municipal Opportunities

- **Waste (recycling, methane capture)**
- **Energy Efficiency (LED, retrofits, rebates, green bldg.)**
- **Transportation (transit, fleets, car sharing, biking)**
- **Renewables (green power purchases, solar, wind)**
- **Other (green purchasing, carbon trading, landscaping)**

Table 1: Summary of Estimated Energy Efficiency Project Costs, Rebates, Energy and Cost Savings

| # | Energy Opportunity | Est. Annual Electrical Savings (kWh) | Peak Demand Reduction (kW) | Est. Annual Cost Savings (\$) | Total Est. Implementation Cost (\$) | Est. SCE Rebate (\$) | Final cost with rebate (\$) | Simple Payback (Years) | ROI (%) |
|----|--|--------------------------------------|----------------------------|-------------------------------|-------------------------------------|----------------------|-----------------------------|------------------------|-----------|
| 1 | Retrofit existing T8 lamps and T12 lamps. Install 3rd generation T-8 lamps and electronic ballasts | 171,885 | 57.1 | \$21,663 | \$230,366 | 75,914 | 154,452 | 7.13 | 14 |
| 2 | CFLs | 55,490 | 23.4 | \$7,544 | \$6,258 | \$2,820 | \$3,438 | 0.46 | 219 |
| 3 | Install Hibay T8s | 70,232 | 28 | \$9,364 | \$18,000 | \$4,800 | \$13,200 | 1.41 | 71 |
| 4 | Install LED Exit Signs | 6,167 | 0.7 | \$943 | \$1,920 | \$864 | \$1,056 | 1.12 | 89 |
| 5 | Vending Misers | 24,232 | 2.8 | \$3,085 | \$2,400 | \$990 | \$1,410 | 0.46 | 219 |
| 6 | Repair Compressed Air Leaks | 6,045 | 0.7 | \$808 | \$150 | \$0 | \$150 | 0.19 | 539 |
| 7 | Install Energy Efficient Motors | 12,790 | 1.4 | \$1,663 | \$4,744 | \$800 | \$4,144 | 2.49 | 40 |
| 8 | Install New Tennis Court and Ball field lighting | 73,579 | 38.8 | \$22,763 | \$123,500 | \$6,300 | \$117,200 | 5.15 | 19 |
| 9 | Install a Cool Roof | 309,744 | 144.0 | \$40,267 | \$67,390 | \$0 | \$67,390 | 1.67 | 60 |
| 10 | Install Window Tinting | 650,474 | 148.0 | \$69,784 | \$339,627 | \$152,832 | \$186,795 | 2.68 | 37 |
| | Totals | 1,380,638 | 445.1 | \$177,884 | \$794,355 | \$245,120 | \$549,235 | 3.09 | 32 |



- Investment driven by policy
- 2006 Investments: \$70.9 billion (43% increase over 2005)
- Venture capital and private equity inc'd from \$2.7 b in 2005 to \$7.1 b in 2006
- R&D inc'd from \$13 billion in 2005 to \$16 billion in 2006

Next steps?



Thank you!



<http://web.mac.com/energyinfo>



2007 Houston World Oil Conference

Proceedings



*Energy Action for a Healthy Economy
and a Clean Environment*

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- [Conference DVD](#)
- [Video Highlights](#)
- [Peak Oil Review](#)
- [ASPO-USA](#)