Community Environmental Council

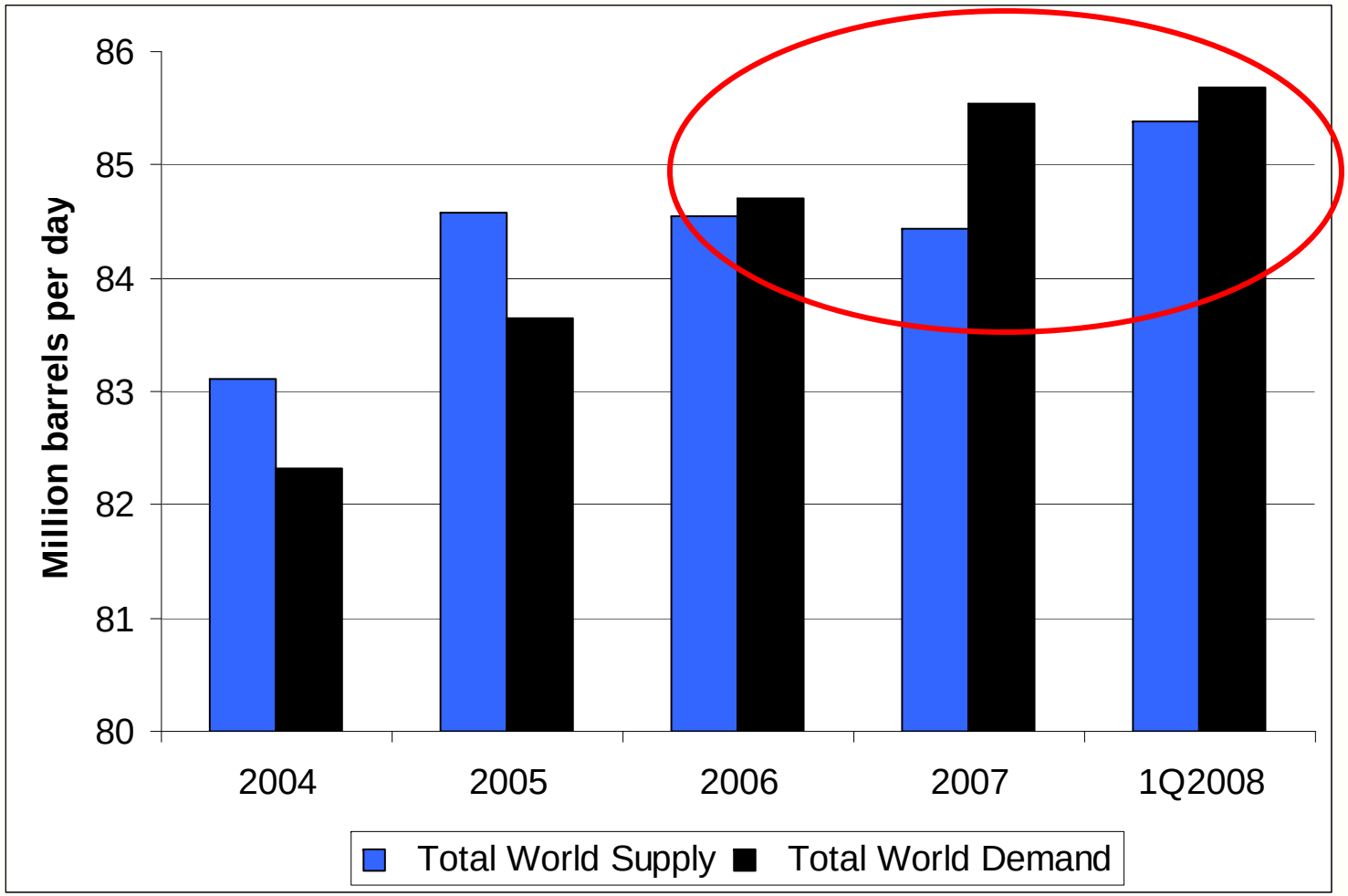
The Peak Oil Crisis and Local Solutions

Today's Presentation

1. The problems: peak oil and climate change
2. The non-solutions
3. The solutions

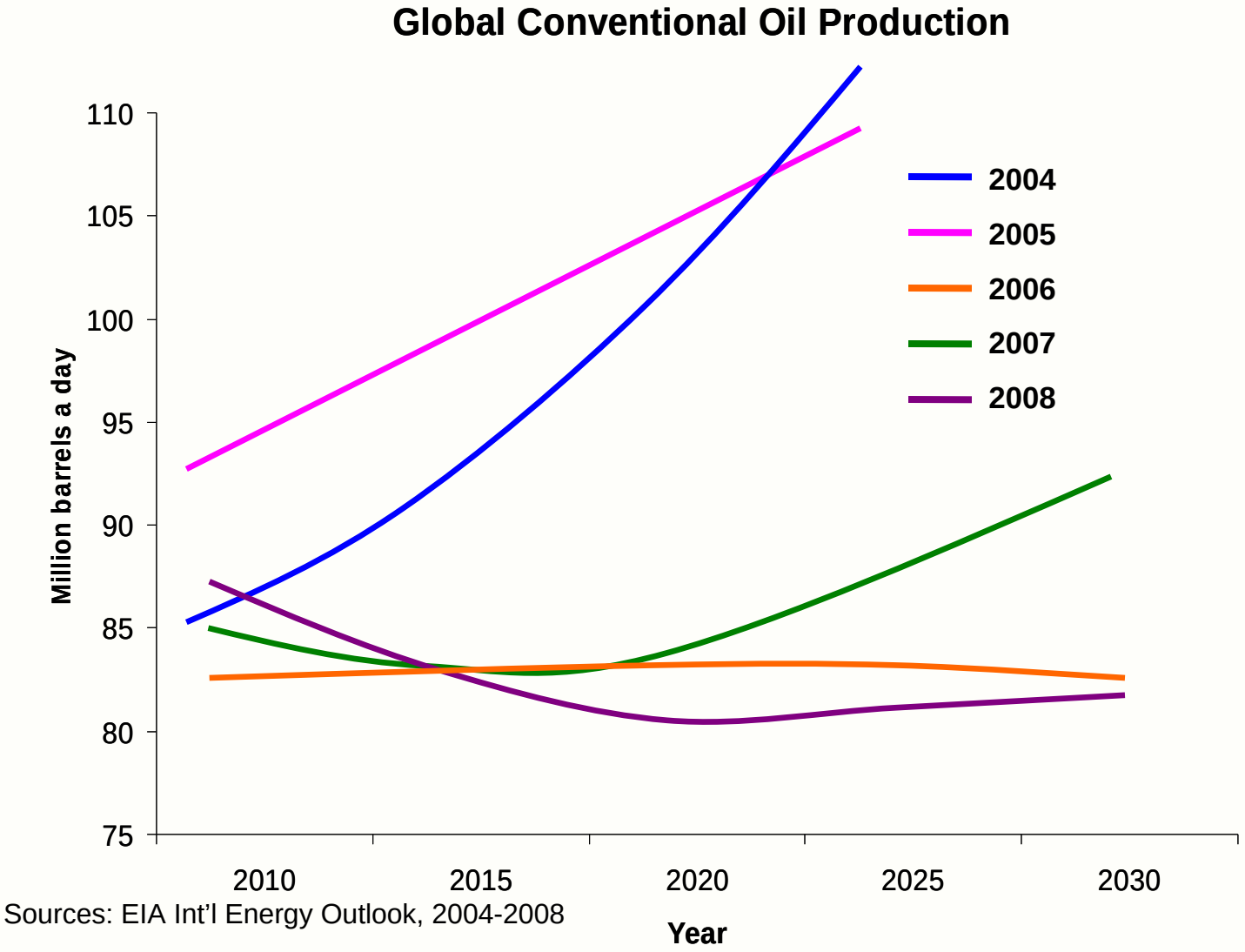
We Have a Winner…

World Oil Balance 2004-2008



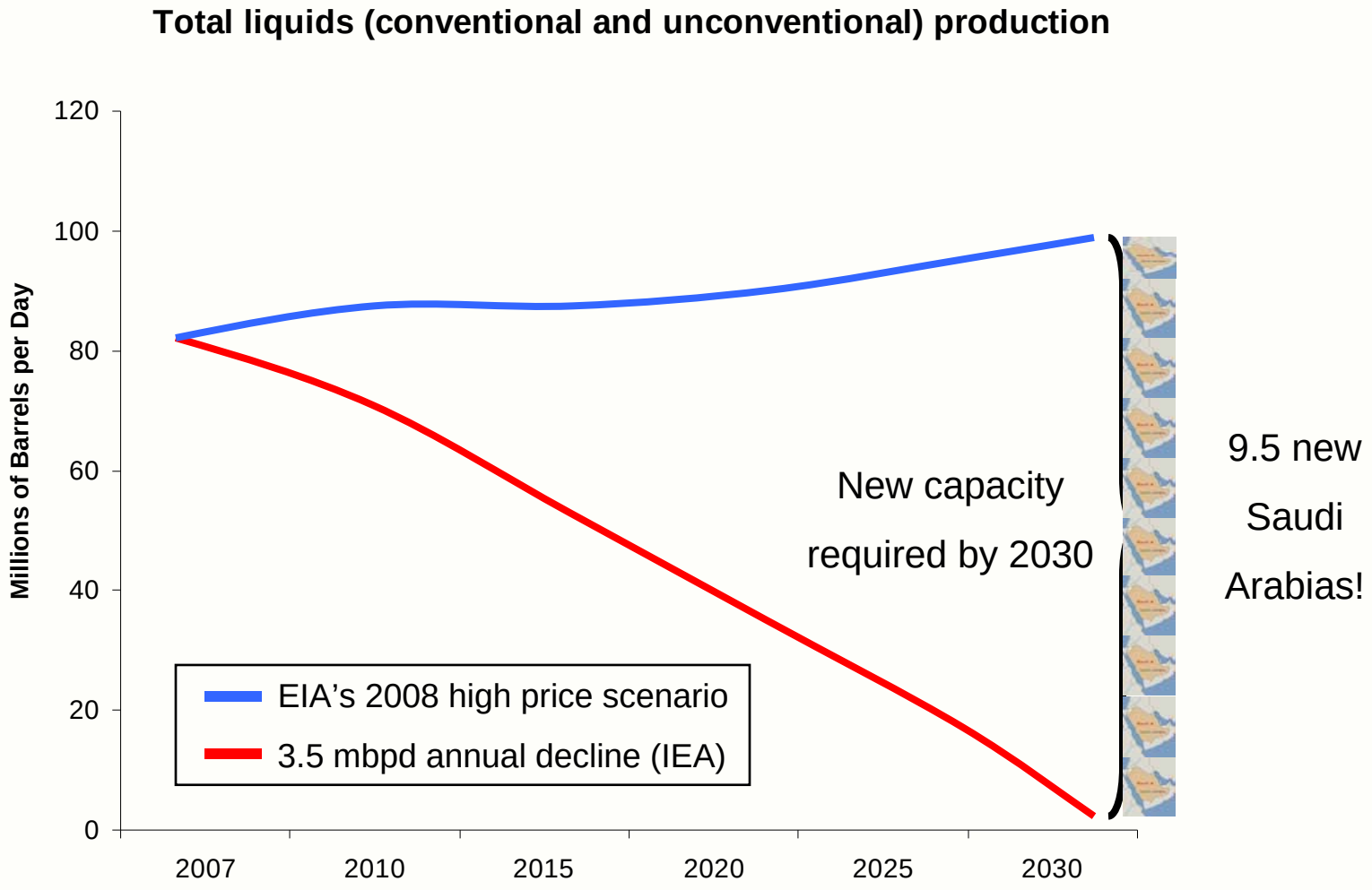
Source: EIA

Where Are We Headed?



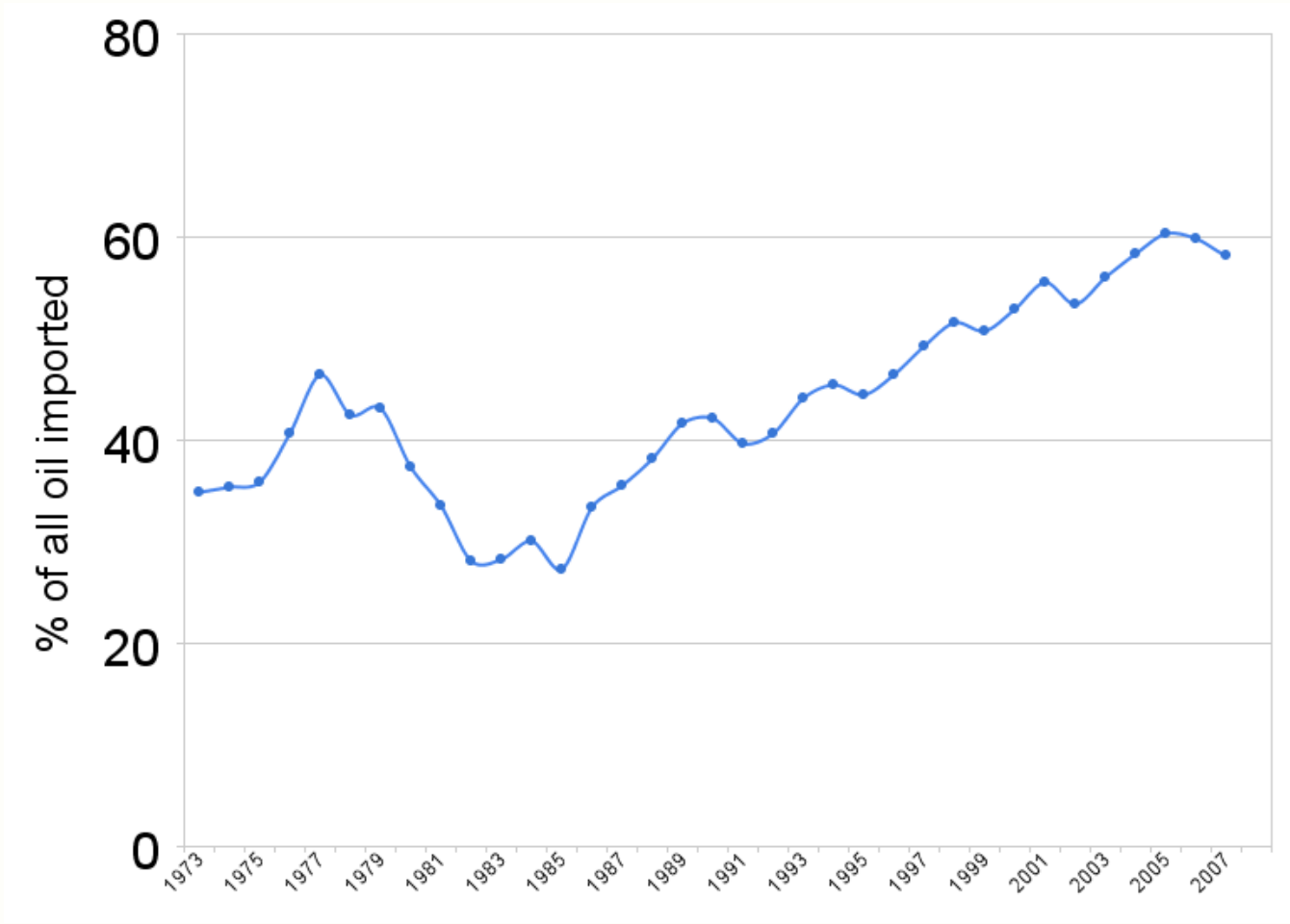
Sources: EIA Int'l Energy Outlook, 2004-2008

Where Are We Really Headed?



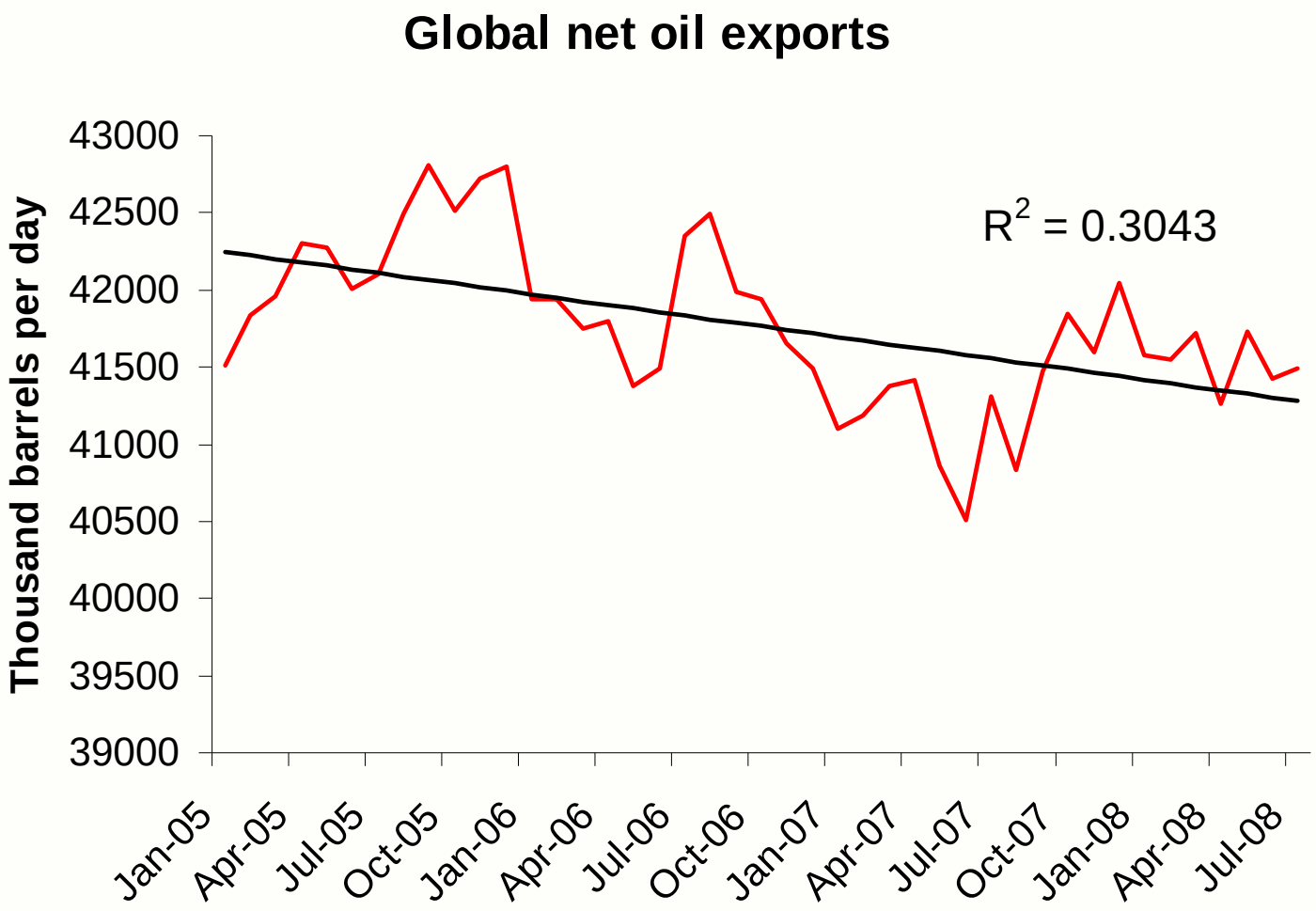
Sources: EIA Annual Energy Outlook, IEA Mid-term Oil Outlook (2008)

National Security: US oil imports



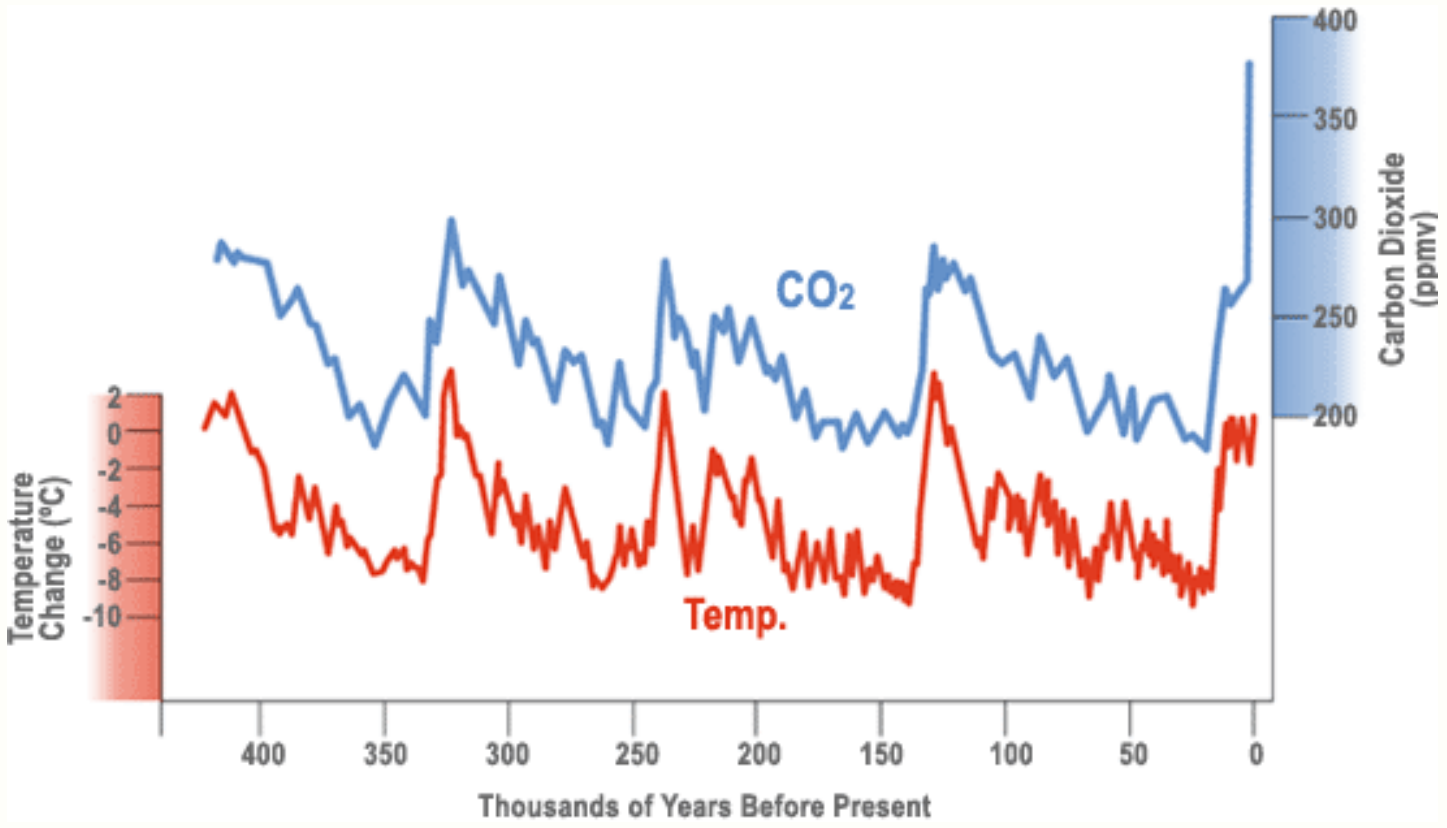
Source: EIA

Global Net Oil Exports



Source: EIA

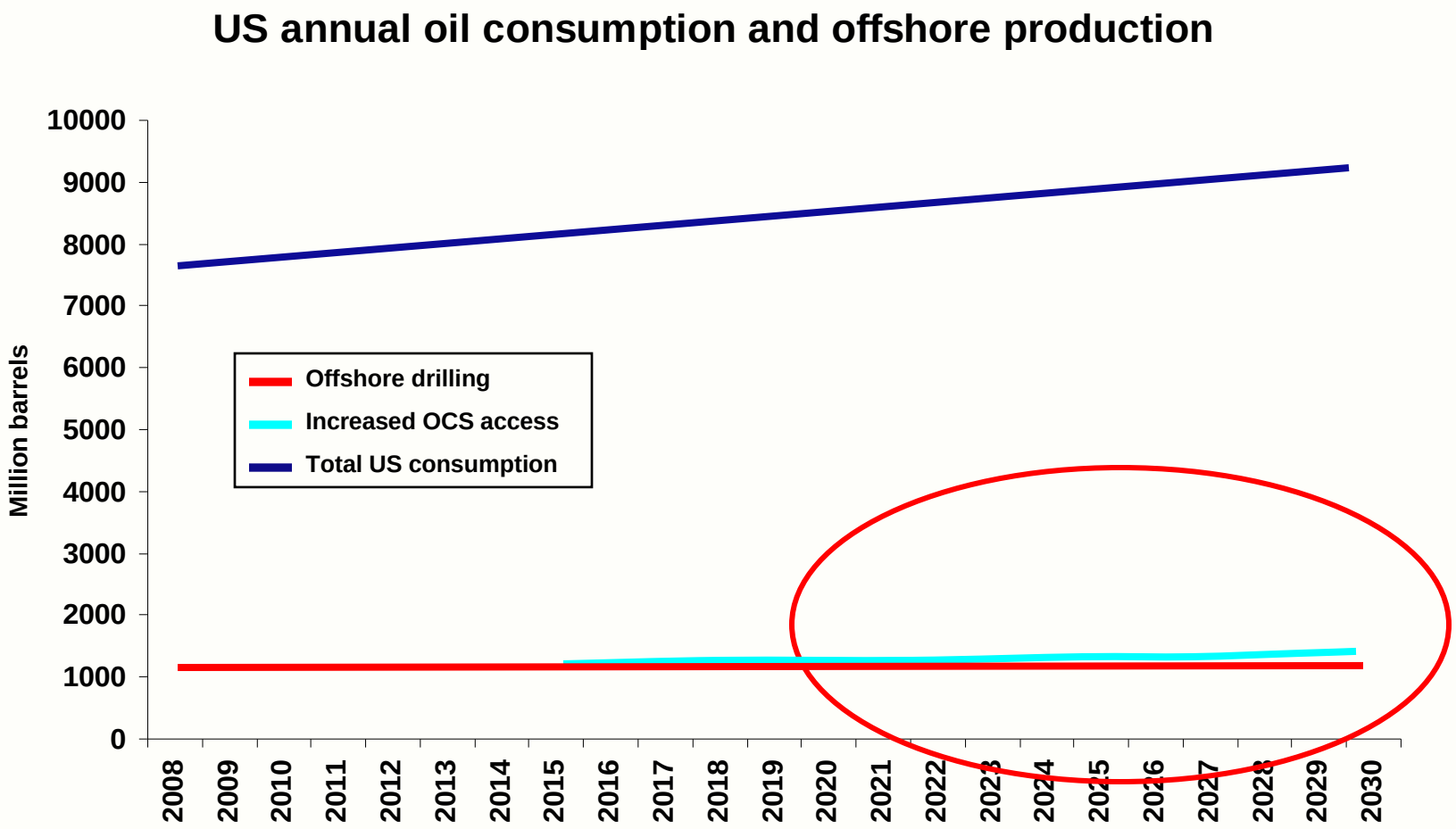
Climate Change



Can Offshore Drilling Help?

- EIA found that increased drilling will have an “insignificant” impact on oil prices, even by 2030

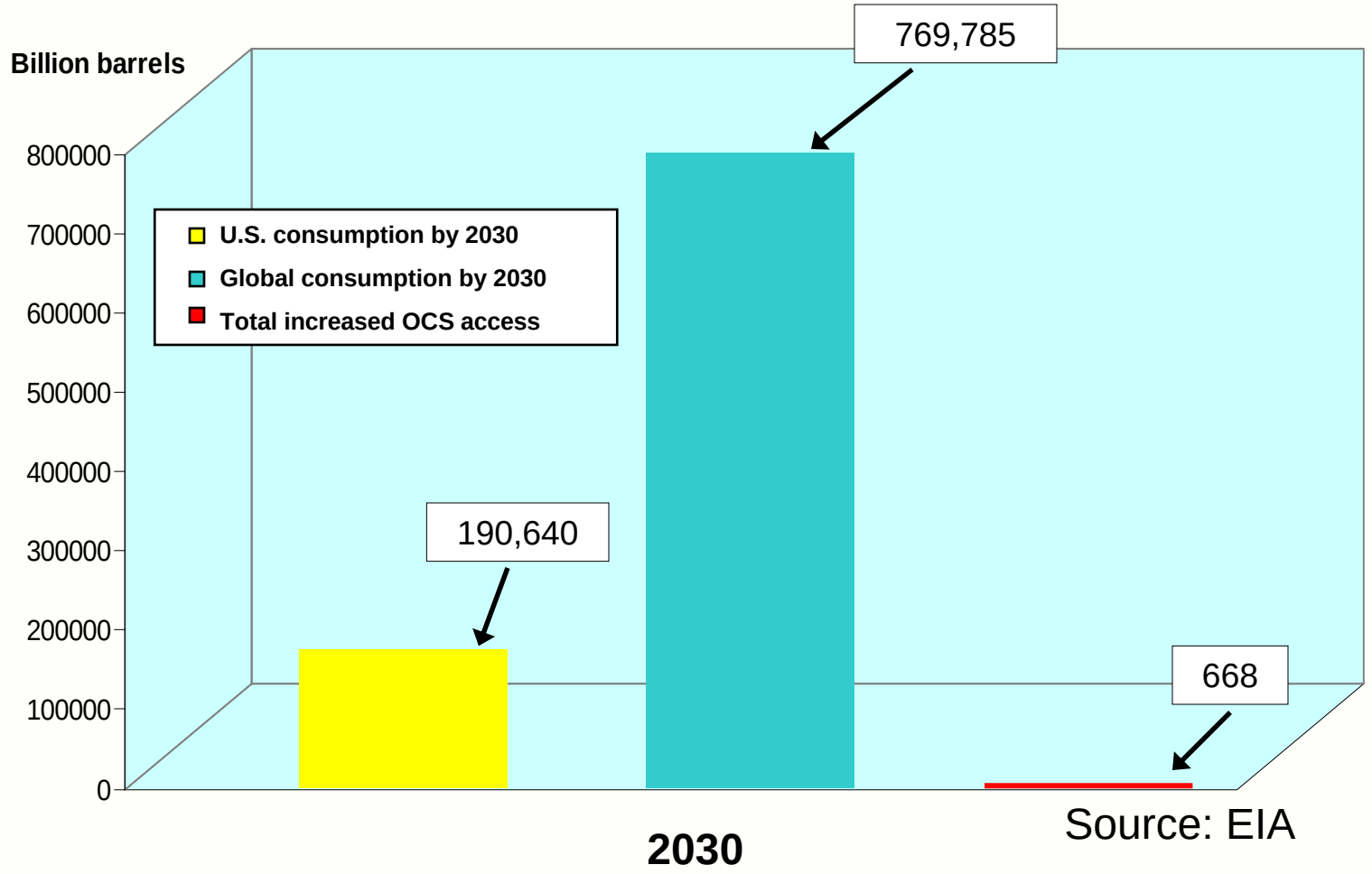
It’s All About Magnitude



Sources: EIA Annual Energy Outlook 2008 and 2007

Another View…

U.S. & global cumulative oil consumption compared to OCS access scenario



Source: EIA

US Oil Supplies Are Tapped Out

- EIA (2008 Annual Energy Outlook):
  - *"With a few exceptions -- namely, deepwater Gulf of Mexico and offshore Alaska -- the remaining domestic petroleum basins have been significantly depleted."*

Drilling is a Non-Solution

- Offshore drilling not a good short-term or long-term solution
- Offshore drilling is a distraction
- ***We can't drill our way out of this problem***

“Dr. No” or “All of the Above”?

a) *Energy efficiency*

b) *Renewables*

c) *Offshore oil*

d) *Nuclear*

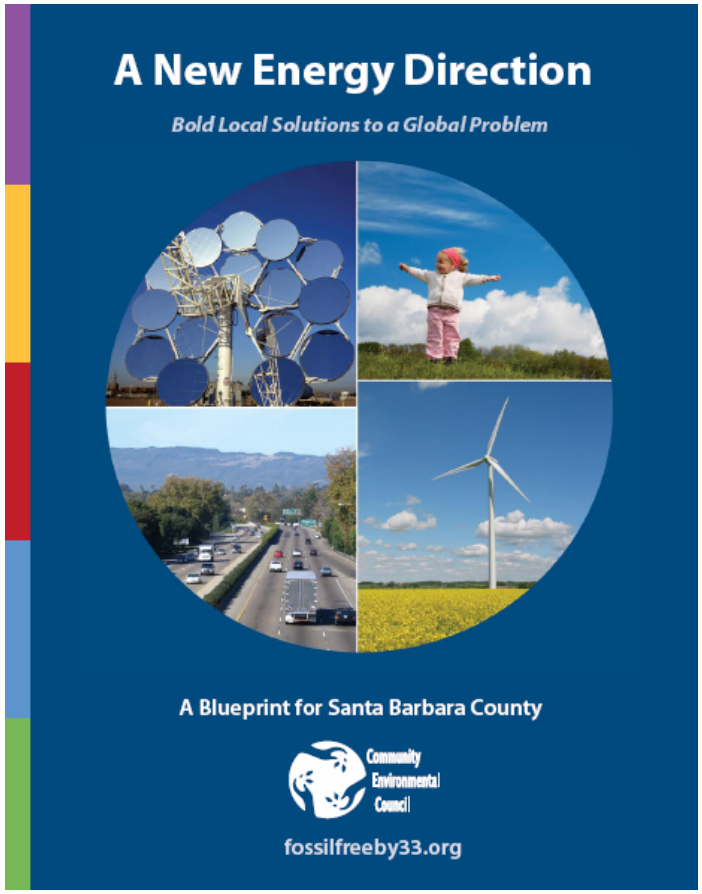
e) *All of the above*

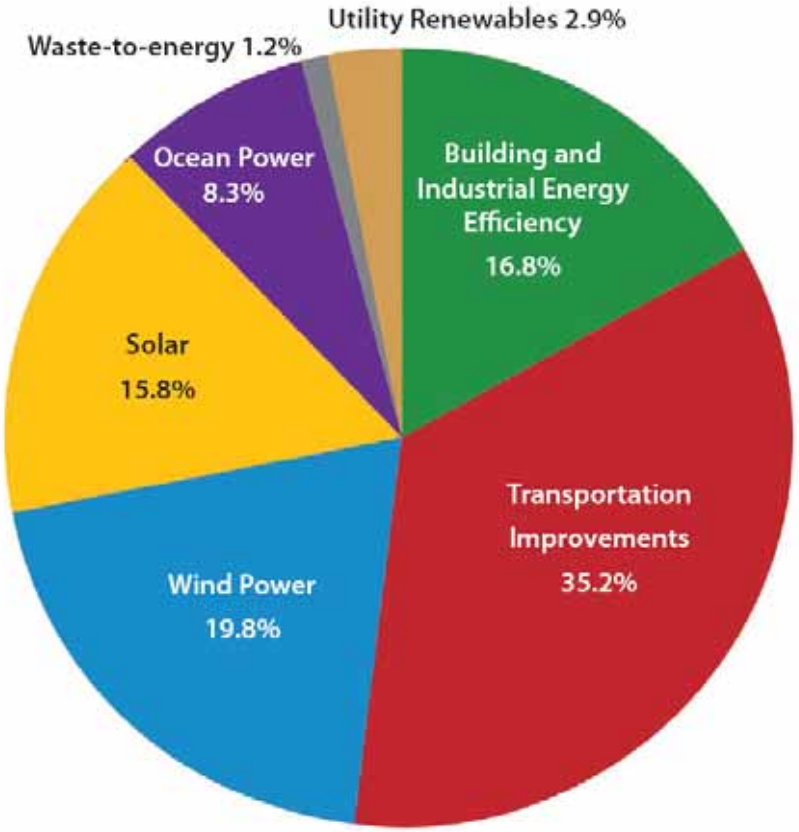
f) ***Smart energy policy***

What's the Smart Energy Policy?

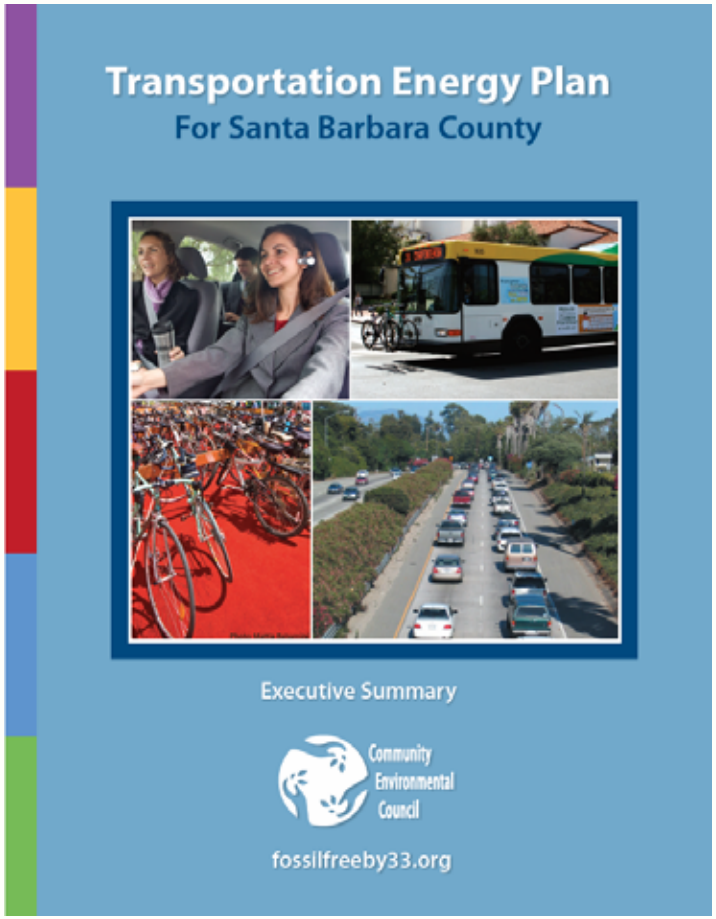
Tech.	Costs	Scalability	Env. Impacts	Legal?
Efficiency	*Low*	*High*	*Low*	*Yes*
Conservation	*Low*	*High*	*Low*	*Yes*
Oil drilling	*High*	*Low*	*High*	*No*
Coal to liquids	*Unknown*	*Medium*	*High*	*Yes*
Hydrogen	*High*	*Low*	*Unknown*	*Yes*
Sustainable Biofuels	*High*	*Medium*	*Unknown*	*Yes*
Coal	*Low (today)*	*High*	*High*	*No*
Nuclear	*High*	*High*	*High*	*No*

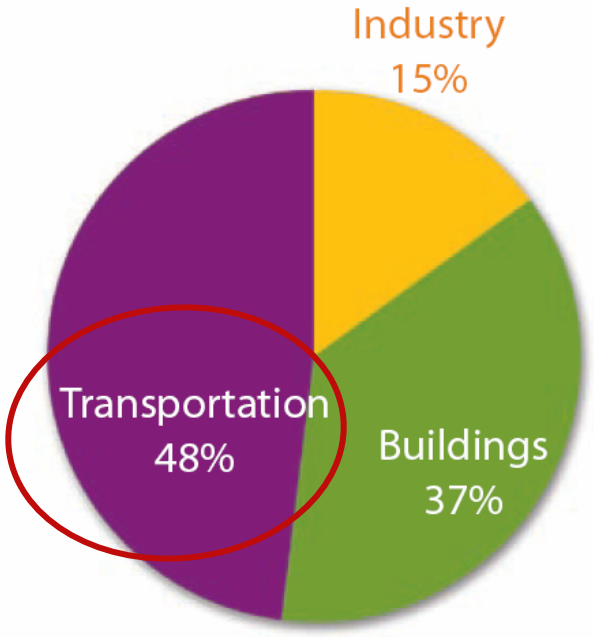
So What Should We Do Here?





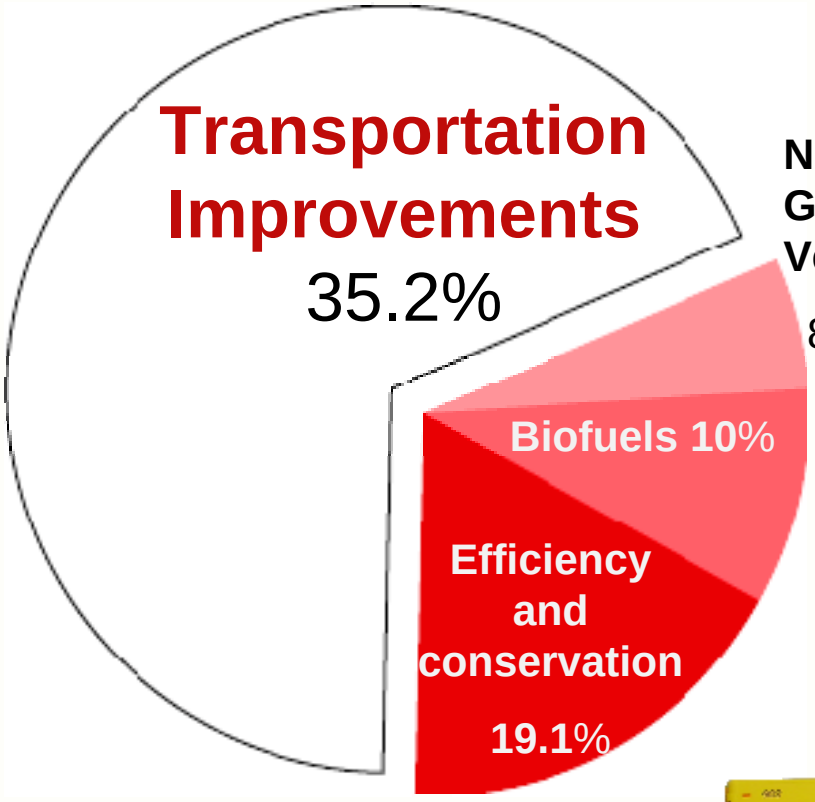
Reducing Petroleum Demand





Santa Barbara County total energy demand, 2006

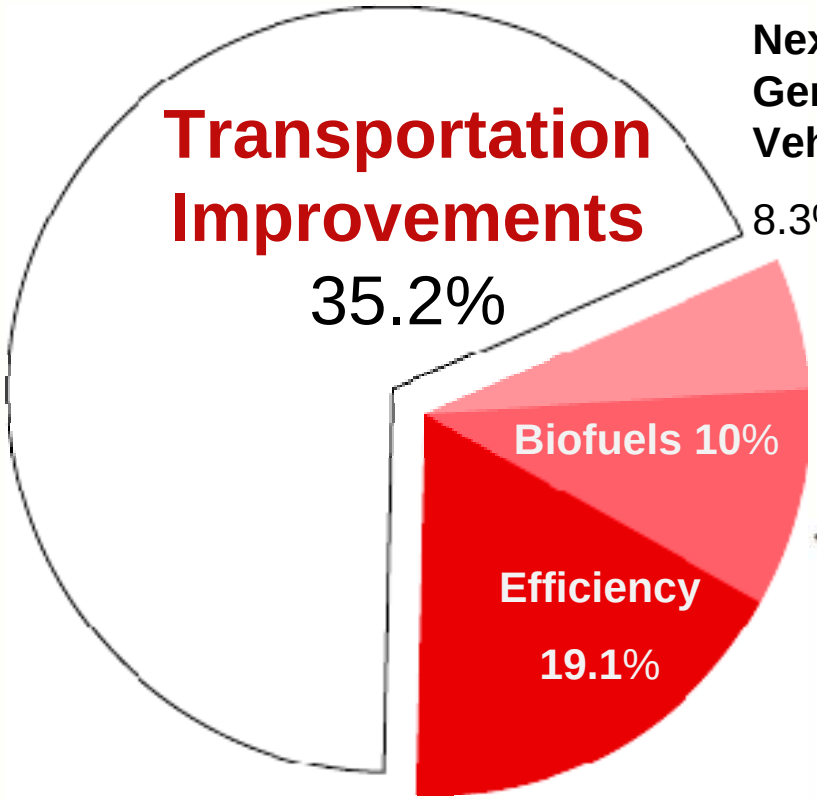
Reducing Petroleum Demand



Next Generation Vehicles

8.3%

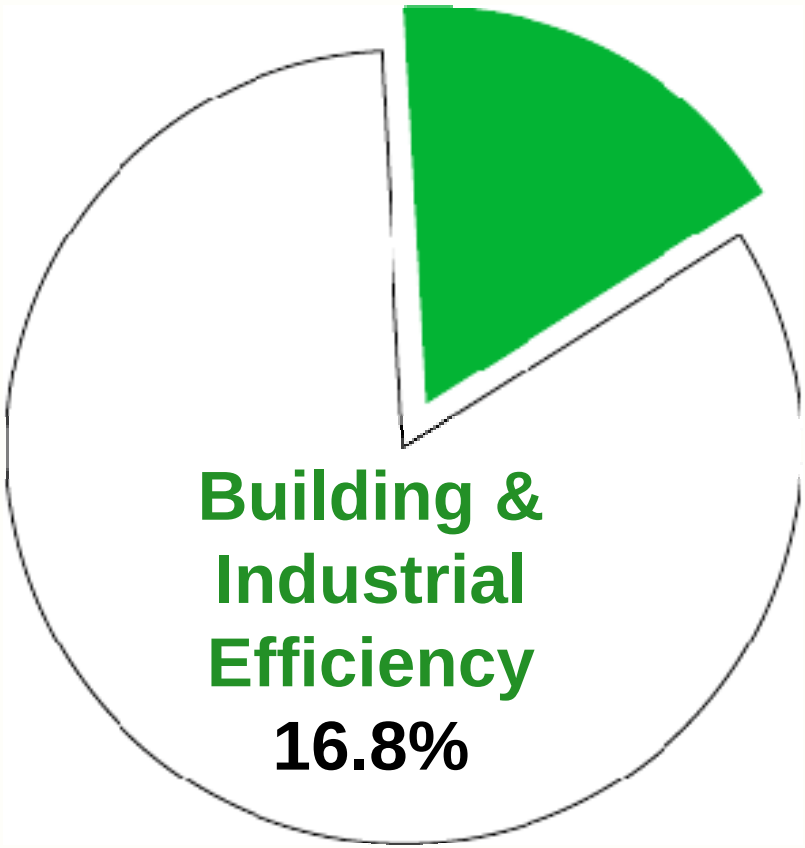
Next Generation Vehicles



Next Generation Vehicles

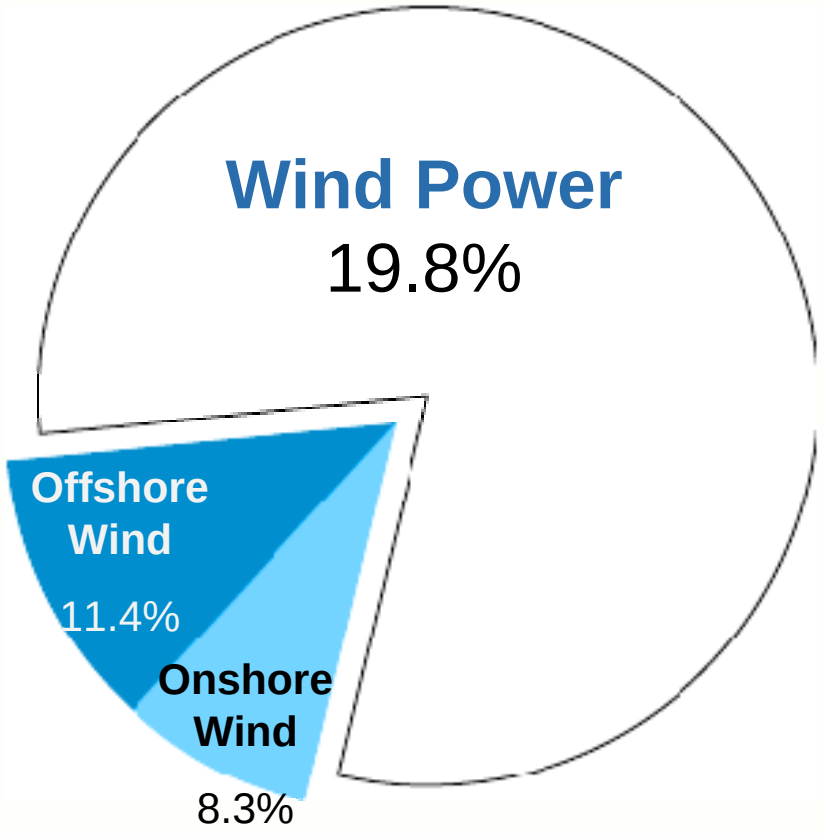
8.3%

Reducing Energy Use in Buildings



Future Sources of Power

Wind



Future Sources of Power

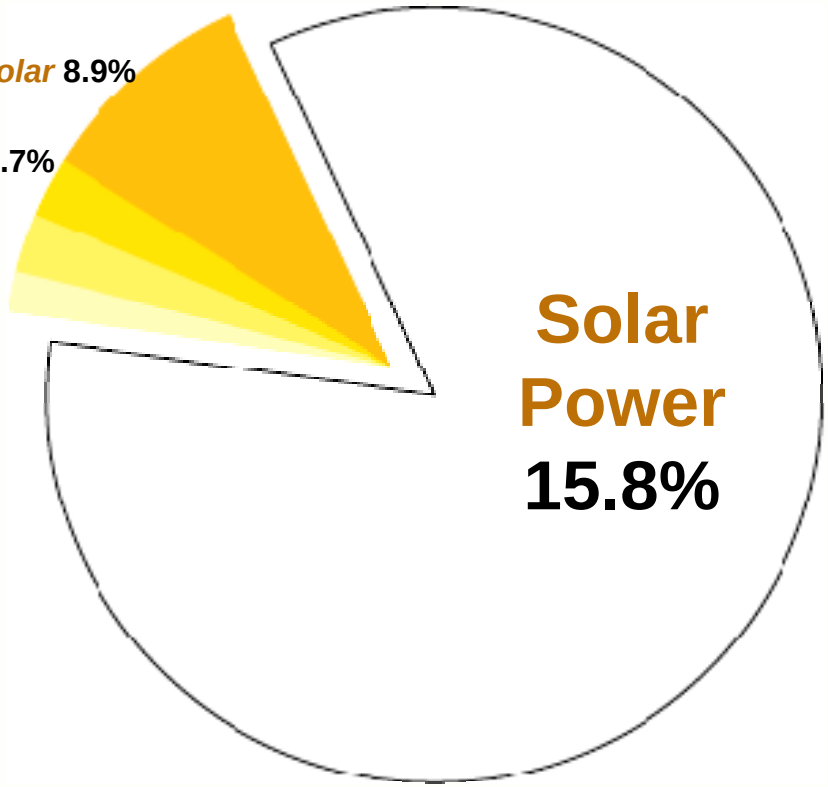
Solar

Concentrating Solar **8.9%**

Solar Hot Water **2.7%**

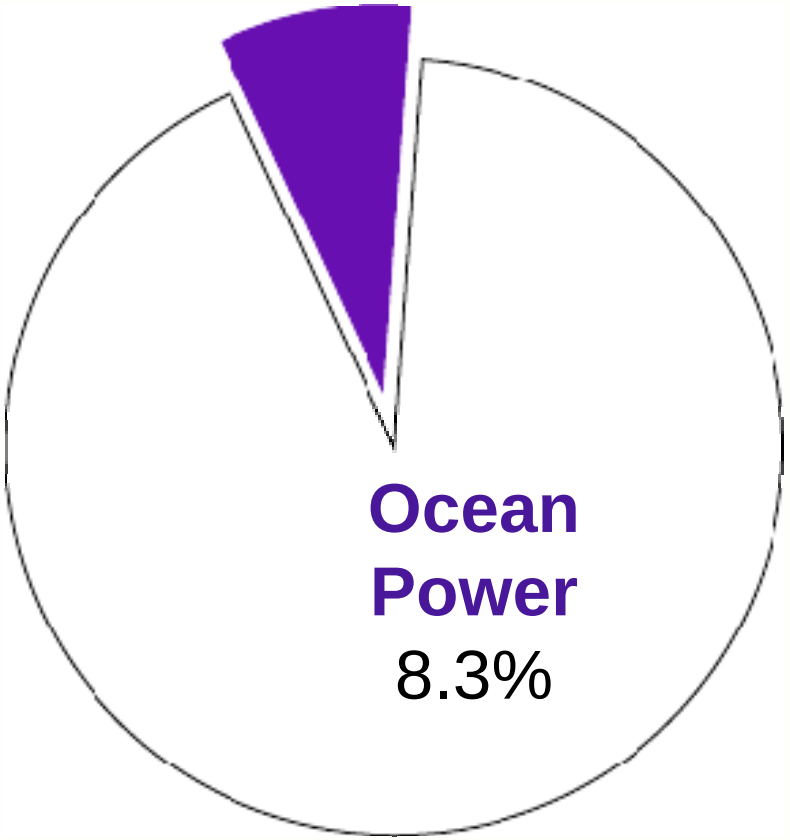
Solar PV **2.4%**

Passive Solar **1.8%**

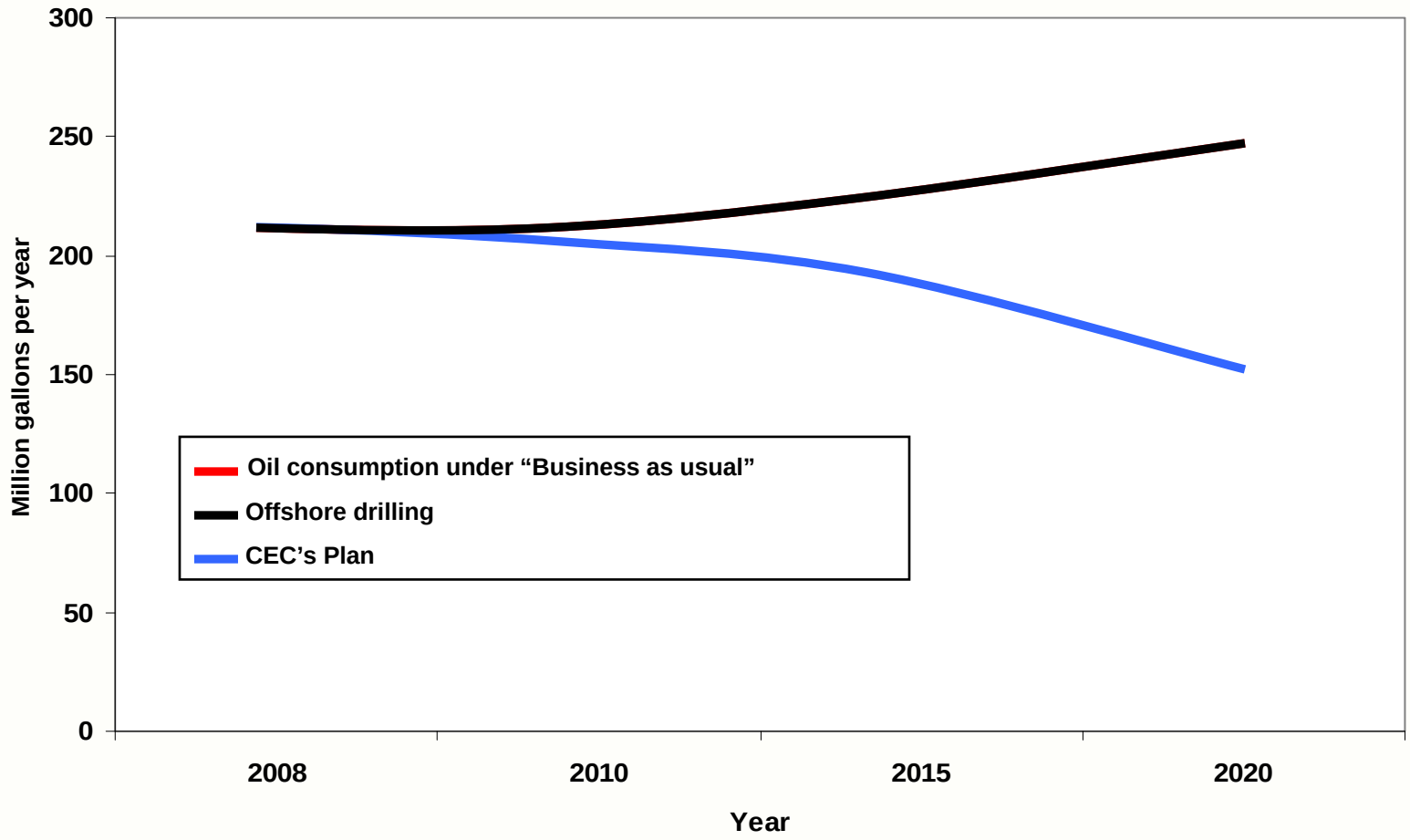


Future Sources of Power

Ocean



The Effects of CEC's Plan by 2020



Our Transpo. Plan Saves Money

> *Energy efficiency and conservation are very cheap*

> *Electricity as a transportation fuel is much cheaper than petroleum*

> *These result in large annual savings in our county:*

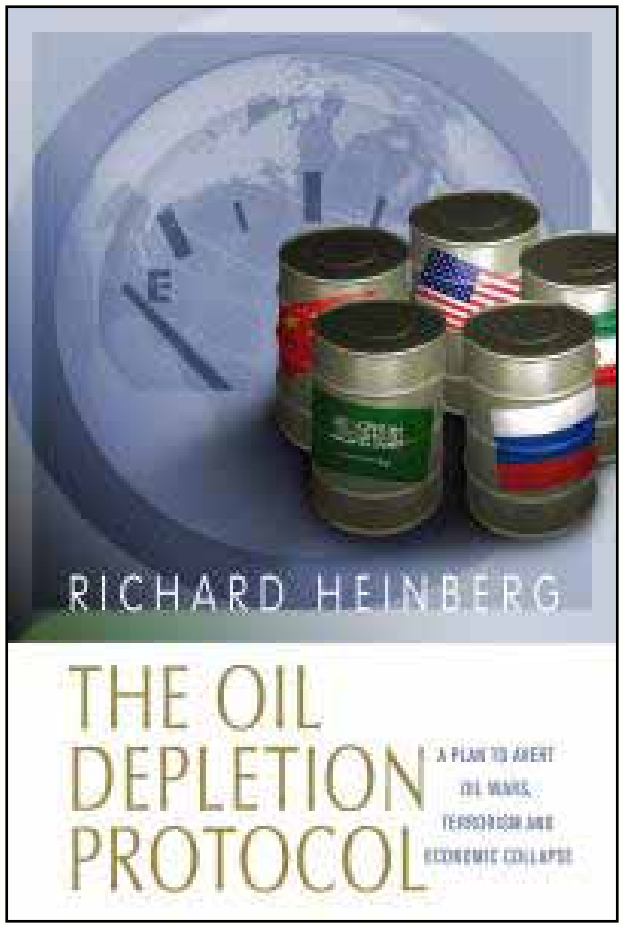
> > **$238 million by 2020** *with low fossil fuel prices*

> > **$2.7 billion by 2020** *with high fossil fuel prices*

Renewables Will Provide Tax Revenue

- The Acciona 120 megawatt wind farm:
  - $1.5-2 million per year
- Four more like it by 2030:
  - $6.5-10 million per year
- American Ethanol project:
  - $3 million per year
- Wave power:
  - Unknown but significant
- Estimated total by 2030:
  - $10-15 million per year
- With PXP Tranquillon Ridge:
  - $20-25 million per year

The Oil Depletion Protocol



- A soft landing is better than a hard landing
- Voluntary 3% reduction in oil demand each year

CEC's Recommendations

1. Maintain the moratorium
2. County Energy Task Force
3. Adopt the Oil Depletion Protocol

“Fossil fuels resemble capital in the bank. A prudent and responsible parent will use his capital sparingly in order to pass on to his children as much as possible of his inheritance.”

Admiral Hyman Rickover, 1957

COMMUNITY ENVIRONMENTAL COUNCIL

Thank you!

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