California Energy: The Untold Story

- Where does today's energy come from?
- What do we use it for?
- What energy sources are forecasted to be used in the next 20 years

A Common Perception

We will be able to significantly power our economy with "Renewable Energy" sources very soon.



Fact

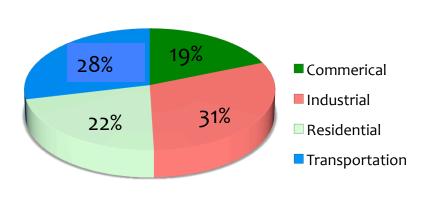
The United State's Department of Energy has forecasted that by 2035 Fossil Fuels will make up 77% of all of our energy we use.

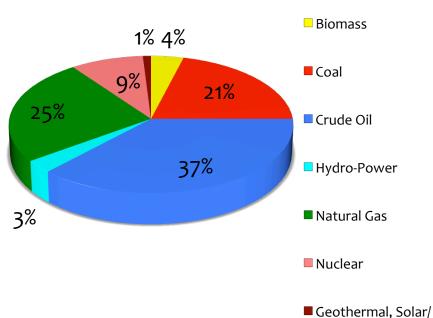
-The Energy Information Administration



US Energy Consumption

Energy Consumption Estimates by Sector 2010 Energy Supply by Source in 2010







Non-renewables: 92% Renewables: 8%



PV, and Wind

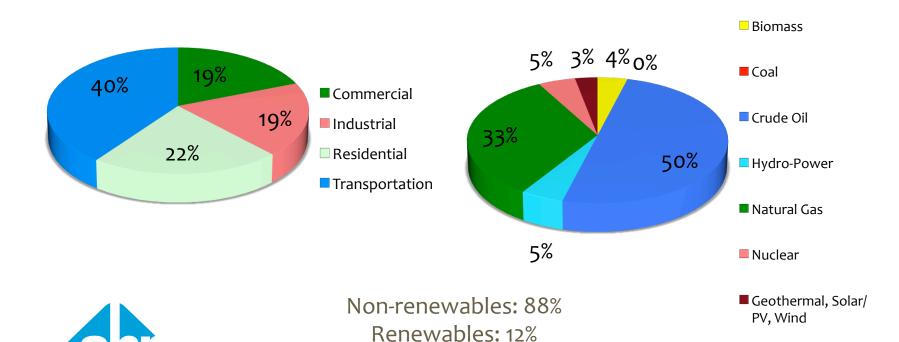
California Energy Consumption

Energy Consumption Estimates by Sector 2010

Signal Hill Petroleum

Energy Supply by Source in 2010

Independent Statistics & Analysis
U.S. Energy Information



California Transportation Fuel Sources: 2010 Data

* Crude Oil 96%

* Ethanol 3%

* Natural Gas 1%

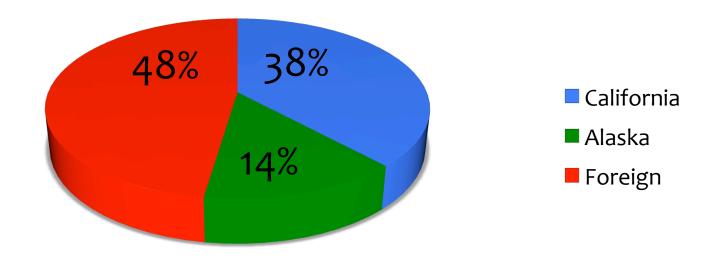






California Crude Oil Supply

Oil Supply Sources to California Refineries 2010

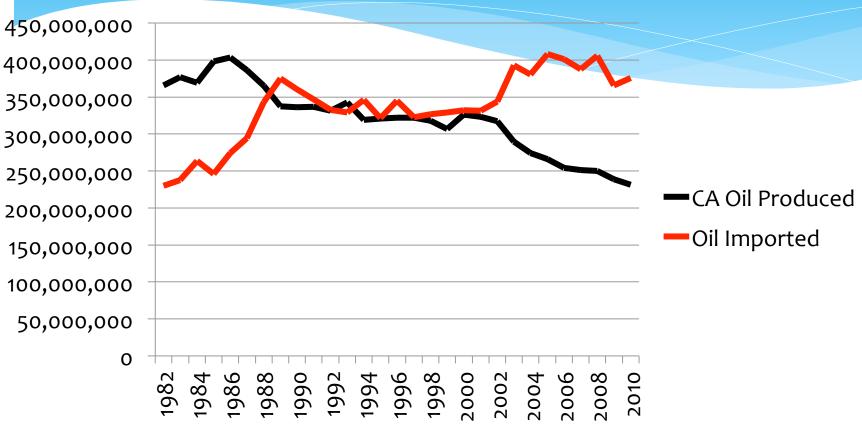






California Oil Supply

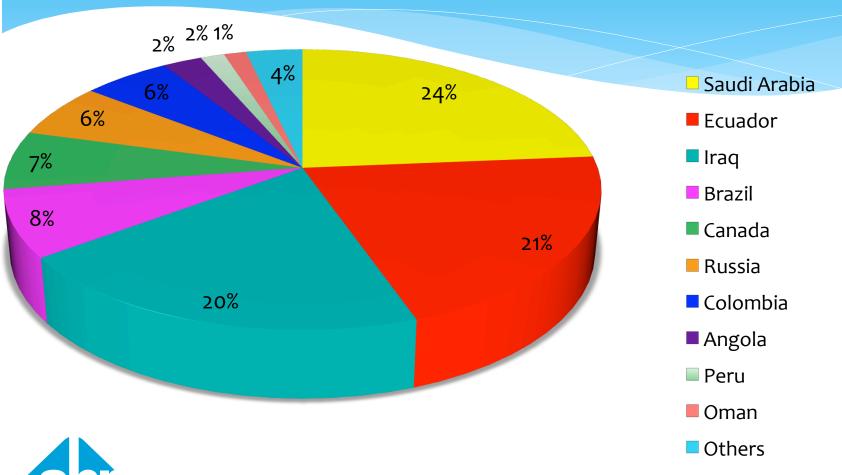
(barrels per year)







Sources of Crude Oil Imports to CA in 2010







Bring Oil to California from around the World

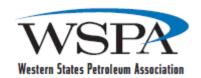


Signal Hill Petroleum

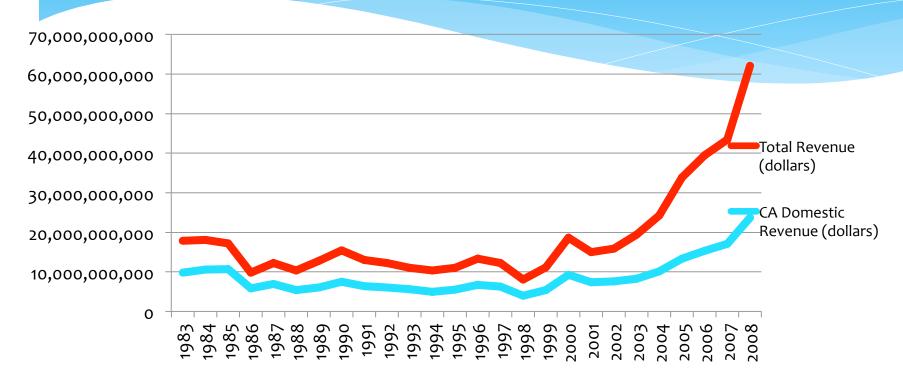
California Crude Oil Economics

Source s	Barrels Per Year	Jobs Created	Taxes Paid (Severance and production taxes)	Energy Security
Californi a	240 million	115,000+	\$400 Million	High
Importe d Crude Oil	275 million	~1,000	\$O	Low





Expenditures for Oil Consumed in California: Produced In-State Oil and All Oil





In 2008, \$62 Billion was spent on Oil Consumed in CA. \$23 Billion was spent on CA Produced Oil. That means in one year \$39 Billion left CA.



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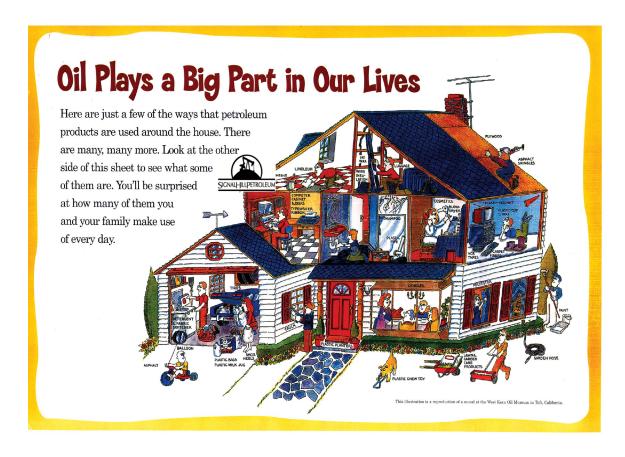
Who Benefits?

Oil Produced in California	Foreign Oil Imports	
California Citizens	Foreign Countries	
Jobs Created	Local Sea Ports	
Government gets Taxes		
R & D Reinvestment		
Dividends		
Royalties		



What is crude oil used for?

- 80% of crude oil is used for transportation fuel: gasoline, diesel and jet fuel
- 20 % of crude oil is used for lubricants and manufacturing synthetic materials, especially plastics



Energy Information Administration 2012 US Energy Outlook

Figure 8. U.S. primary energy consumption by fuel, 1980-2035 (quadrillion Btu per year)

