

Proposition 87, The Clean Alternative Energy Act – James Harrison & Thomas Willis

Staff Recommendation:

OPPOSE

Board Recommendation (9/15/06):

OPPOSE

Rationale:

This measure would levy a severance tax¹ on oil production in California at a variable rate depending on the price of oil. Since current prices are above \$60 per barrel this rate would be 6%. The proposition is unclear on whether this applies to the full value of a barrel or simply to the value in excess of \$60. Pending legal resolution of this ambiguity, projected annual revenues are from \$225 to \$485 million. Within 10 years, a total of \$4 billion must be spent on alternative energy for transportation. The tax would remain in effect until this is achieved. The funds would be spent through the California Energy Alternatives Program Authority, a reorganized government entity, on various programs designed to reduce gasoline usage by 25% and promote alternative energy.

This measure would effectively create an entirely new state bureaucracy with 55 new appointed positions. Administrative costs are capped at 3.5% and would total \$140 million over the life of the tax.

Although the intention of this measure—to promote the usage of alternative fuels—has some merit, it places an undue burden on oil producers and consumers in the state. Despite a provision prohibiting producers from passing on the cost of the severance tax to consumers, prices will likely rise due either to a reduction in supply or an increase in more expensive imported crude oil. Given what appears to be a slowdown in the housing market, the state and local economy may be especially vulnerable to increases in the cost of petroleum products.

Severance taxes in general are not a preferred method of taxation. Because they increase the marginal costs of production, they affect firm decisions of whether to produce or not. In the end they discourage whatever activity they are taxing. Severance taxes may be a good instrument of public policy if the intention is to internalize external costs such as environmental degradation as a result of drilling activities. However, since that is not the thrust of this measure, this degree of government interference in the market is ill advised.

Lastly, the legal ambiguity over the correct rate of taxation will almost certainly lead to protracted and costly litigation. The fact that such a key provision of the legislation was so poorly written is reason enough to oppose the measure.

¹ Section 18, Part 21, §42001(j): “Severed” or “severing” means the extraction or withdrawing from below the surface of the earth or water of any oil...

Background:²

California Oil Production. In 2005, California's estimated oil production (excluding federal offshore production) totaled 230 million barrels of oil—an average of 630,000 barrels per day. California's 2005 oil production represents approximately 12 percent of U.S. production, making California the third largest oil-producing state, behind Texas and Alaska. Oil production in California peaked in 1985, and has declined, on average, by 2 percent to 3 percent per year since then. In 2005, California oil production supplied approximately 37 percent of the state's oil demand, while Alaska production supplied approximately 21 percent, and foreign oil supplied about 42 percent.

Virtually all of the oil produced in California is delivered to California refineries. In 2005, the total supply of oil delivered to oil refineries in California was 674 million barrels, including oil produced in California as well as outside the state. Of the total oil refined in California, approximately 67 percent goes to gasoline and diesel (transportation fuels) production.

Oil-Related Taxation in California. Oil producers pay the state corporate income tax on profits earned in California. Oil producers also pay a regulatory fee to the Department of Conservation (which regulates the production of oil in the state) that is assessed on production, with the exception of production in federal offshore waters.

This regulatory fee is used to fund a program that, among other activities, oversees the drilling, operation, and maintenance of oil wells in California. Currently, producers pay a fee of 6.2 cents per barrel of oil produced, which will generate total revenues of \$14 million in 2006-07. Additionally, property owners in California pay local property taxes on the value of both oil extraction equipment (such as drills and pipelines) as well as the value of the recoverable oil in the ground.

²Source: LAO analysis, http://www.lao.ca.gov/ballot/2006/87_11_2006.htm

Proposal:

Ballot Title and Summary³

Alternative Energy. Research, Production, Incentives. Tax on California Oil Producers. Initiative Constitutional Amendment and Statute.

- Establishes \$4 billion program with goal to reduce petroleum consumption by 25%, with research and production incentives for alternative energy, alternative energy vehicles, energy efficient technologies, and for education and training.
- Funded by tax of 1.5% to 6% (depending on oil price per barrel) on producers of oil extracted in California. Prohibits producers from passing tax to consumers.
- Program administered by new California Energy Alternatives Program Authority.
- Prohibits changing tax while indebtedness remains.
- Revenue excluded from appropriation limits and minimum education funding (Prop 98) calculations.

Fiscal Effect:

Revenues. Cumulative revenues of the tax are capped at \$4 billion not including debt service after that amount has been spent. The estimated yearly revenues will range from \$225 to \$485 million depending on whether the tax is assessed on the full value of a barrel of oil or on the margin that exceeds certain prices. Due to this ambiguity, it is unclear how long the severance tax will last. However, since the measure requires the authority to spend \$4 billion within 10 years, it would seem that the intention was that the severance tax be assessed on the full value of each barrel of oil.

Allocation of Funds. Funds would be continuously allocated. They would not be subject to any other use other than what is provided in the measure.

Prop 87 Revenues

Annual Revenues (millions)		
	225	485
Cumulative Revenues (millions)		
Year	Marginal	Full
2007	\$ 225	\$ 485
2008	\$ 450	\$ 970
2009	\$ 675	\$ 1,455
2010	\$ 900	\$ 1,940
2011	\$ 1,125	\$ 2,425
2012	\$ 1,350	\$ 2,910
2013	\$ 1,575	\$ 3,395
2014	\$ 1,800	\$ 3,880
2015	\$ 2,025	\$ 4,365
2016	\$ 2,250	
2017	\$ 2,475	
2018	\$ 2,700	
2019	\$ 2,925	
2020	\$ 3,150	
2021	\$ 3,375	
2022	\$ 3,600	
2023	\$ 3,825	
2024	\$ 4,050	
2025	\$ 4,275	

Source: LAO, SDCTA

³ Source: California Secretary of State

CALIFORNIA ENERGY INDEPENDENCE FUND/ALLOCATION OF FUNDS

Account	Percent	Annual Amount (millions)		Cumulative Amount (millions)
		Marginal	Full	
Gasoline and Diesel Use Reduction Account	57.50%	\$ 129	\$ 279	\$ 2,300
Research and Innovation Acceleration Account	26.75%	\$ 60	\$ 130	\$ 1,070
Commercialization Acceleration Account	9.75%	\$ 22	\$ 47	\$ 390
Vocational Training Account	2.50%	\$ 6	\$ 12	\$ 100
Public Education and Administration Account	3.50%	\$ 8	\$ 17	\$ 140
TOTAL	100.00%	\$ 225	\$ 485	\$ 4,000

Source: LAO, SDCTA

California Energy Alternatives Program Authority

Account	Functions and Powers	Detail and Comments
Gasoline and Diesel Use Reduction Account	Market-based incentives	Loans, loan guarantees, credits, vehicle fleet buydowns
	Production Incentives	loans, loan guarantees, credits for clean alternative fuel production (excluding electricity production)
	Ethanol Incentives	loans, loan guarantees, credits and grants for the construction of refueling stations
	Clean Alternative Fuel Infrastructure	loans, loan guarantees, and grants
	Research Grants	loans etc. to private enterprises for clean alternative fuel vehicle research
Research and Innovation Acceleration Account	California University Research Grants	improve the economic viability and acceleraerate the commercialization of renewable energy technologies
Commercialization Acceleration Account	Incentives for One-Time Start-up Costs	loans and other incentives to accelerate the production and distribution of commercially viable alternative energy products
Vocational Training Account	California Community College Grants	for staff development and facilities to train students to work with alternative energy technologies
	Low-income Tuition Assistance	for students, former fossil fuel energy workers and certified auto mechanics to obtain training with alternative energy technologies
Public Education and Administration Account	Public Education	public education regarding the importance of energy efficiency technologies, etc.
	Administration	administration of the authority
	Monitoring	monitor implementation of fund programs, gather evidence of price gouging by oil producers

Market Effects.⁴ While it is difficult to predict the exact market effects of the proposed 6% severance tax, the effects that do materialize will almost certainly have a negative impact on the San Diego economy. The increase in marginal costs of production of oil in California will decrease supply and increase the price of all petroleum products. A reduction in supply of 52,000⁵ barrels per day would lead to a maximum decrease of 7.09% in the supply of reformulated gasoline (RFG). If demand remains constant and no other sources of supply are used to compensate, the supply shock would cause the average price of regular gasoline to increase by \$1.42 to \$4.61 per gallon.

There are two ways in which this shock could be avoided; either demand for diesel and gasoline decreases or supplies of oil imported from outside of California increase. In the short run it is likely that loss of locally produced supplies of petroleum will be offset by increased imports. The higher distribution costs associated with these imports will put upward pressure on prices. In the long run, demand may fall as more consumers switch to alternative fuels. This long-term trend may be accelerated by the incentives provided by the newly created California Energy Alternatives Program Authority, however it is difficult to predict whether and how successful the program will be in this.

Impact of Prop 87 on the Supply of Reformulated Gasoline (per day)	
Crude Oil Inputs (barrels)	733,000
Barrels of Oil Used for RFG Production	491,110
Percent Used for RFG Production	67%
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Supply Reduction (barrels of oil for RFG)	52,000
New Supply Level (barrels)	681,000
Post 87 Barrels of Oil Uses for RFG Production	456,270
Percent Change in RFG Production	-7.09%

Source: LAO, LECG, SDCTA

Market Effects of Prop 87 Assuming Alternative Sources of Supply Not Used to Fulfill Unmet Demand	
Percent Change in RFG Supply	-7.09%
Price Elasticity of Gasoline	-0.16
Percent Change in RFG Price as a Result of Reduced Supply	44.34%
Change in RFG Price (\$)	\$ 1.42
New Average RFG Price (\$)	\$ 4.61

Source: EIA, Charles Komanoff, LECG, SDCTA

⁴ Data for this section is gathered from three main sources. First, the Energy Information Administration (EIA) in the U.S. Department of Energy publishes data on energy markets and supplies. Second, Charles Komanoff is a well known energy economist and author that compiles gasoline price elasticity statistics. Third, LEFG is an economic consulting firm retained by the No on 87 campaign to estimate the potential market impacts of the proposition. Although LEFG numbers should be taken with a grain of salt, they can be interpreted as one end of a range of possibilities.

⁵ Alberro, Jose L. et. al., *Analysis of the Proposed Severance Tax: Impact on California Oil Production and Gasoline Prices*, LECG, June 2006

Arguments of the Proponents:

1. Make oil companies pay their fair share to promote cheaper alternative fuels.
2. Current fuels cause air pollution, lung disease and cancer.
3. Oil companies will pay the same level of drilling fees as in Louisiana, Alaska and Texas.
4. Will create thousands of new jobs and economic growth.
5. Will reduce dependence on oil from Saudi Arabia and Iraq
6. No new bureaucracy.
7. Strict accountability requirements.

Signors/ Supporters for the Arguments (Prop 87) – Clean Alternative Energy Act

- Laura Keegan Boudreau, CEO, American Lung Association of California
- Winston Hickox, Former Secretary, California EPA
- Jamie Court, President, Foundation for Taxpayer and Consumer Rights

Arguments of the Opponents:

1. New tax will increase gas prices.
2. Higher taxes on domestic oil will increase dependence on foreign oil.
3. Creates a new state bureaucracy with 50 new political employees.
4. Lets the new bureaucracy keep spending even if they are not producing results.
5. Robs schools of their fair share of new revenues.
6. Would reduce tax revenues used for education, public safety, health care and transportation needs.

Signors for the Arguments in Opposition to Prop 87:

- Larry McCarthy, President, California Taxpayers' Association
- Daniel Cunningham, President, California Small Business Alliance
- Marian Bergeson, Past President, California School Boards Association

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