

ELECTRONICALLY FILED  
Superior Court of California  
County of Santa Barbara  
Darrel E. Parker, Executive Officer  
7/8/2025 8:00 AM  
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SABLE OFFSHORE CORP. and PACIFIC PIPELINE COMPANY

14 **SUPERIOR COURT OF THE STATE OF CALIFORNIA**  
15 **COUNTY OF SANTA BARBARA**

17 CENTER FOR BIOLOGICAL DIVERSITY,  
18 et al.,

19 Petitioners and Plaintiffs,

20 v.

21 CALIFORNIA DEPARTMENT OF  
FORESTRY AND FIRE PROTECTION, et al.,

22 Respondents and Defendants,

23 and

24 SABLE OFFSHORE CORP., et al.,

25 Real Parties in Interest.

Case No. 25CV02244  
[Coordinated with Case No. 25CV02247]

Assigned for all purposes to:  
Hon. Donna D. Geck

**DECLARATION OF MICHAEL A.  
MISCHE IN SUPPORT OF REAL  
PARTIES' OPPOSITION TO  
PRELIMINARY INJUNCTION**

*[Filed concurrently with Opposition to  
Preliminary Injunction; Declarations of Steve  
Rusch, Bart Leininger, Brien Vierra, and  
Michael J. Rosenfeld]*

Date: July 18, 2025  
Time: 10:00 AM  
Dept.: 4

Complaint Filed: April 15, 2025  
Trial Date: None Set

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**TABLE OF CONTENTS**

I. INTRODUCTION AND QUALIFICATIONS ..... 6

    A. Assignment and Scope of Work Performed..... 6

    B. Qualifications and Background ..... 8

    C. Materials and Evidence Considered ..... 9

    D. Compensation ..... 10

II. SUMMARY OF CONCLUSIONS ..... 10

III. ANALYSIS ..... 13

    A. Understanding Petroleum ..... 13

    B. Economic Role & Impact ..... 15

        i. Global ..... 15

        ii. United States ..... 21

    C. California Petroleum..... 22

        i. Economic Contributions ..... 22

        ii. Employment..... 25

        iii. Production..... 27

        iv. Movement & Transportation ..... 31

        v. California Consumption..... 35

        vi. California Imports..... 38

    D. Crude Oil Pricing..... 45

        i. Commodity Pricing & Volatility ..... 45

        ii. California Crude Pricing..... 49

    E. Sable Offshore Corp. .... 50

        i. Sable Oil Reserves, Capacity and Platforms (wells) ..... 50

        ii. Sable Production Operational Analysis ..... 52

        iii. Sable Customers and Selling Markets ..... 53

        iv. Sable’s Pipelines ..... 54

        v. Potential Economic Impact on State, Santa Barbara & Adjacent Counties  
            ..... 55

        vi. Potential Economic Implications of Sable Production on Employment  
            and Personal Income..... 58

        vii. Potential Implications of Sable Production on California Oil Prices .... 60

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
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14  
15  
16  
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19  
20  
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22  
23  
24  
25  
26  
27  
28

IV. SUMMARY CONCLUSIONS ..... 61

    A. Summary and General Conclusion ..... 61

    B. Pertinent Findings ..... 61

    C. Key Conclusions ..... 63

**EXHIBIT A** ..... 66

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
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21  
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23  
24  
25  
26  
27  
28

## LIST OF FIGURES

- Figure 1: California Sources, Grades, & Transportation Methods for Crude Oil (2018-2024)
- Figure 2: Global Production & Consumption - Top 10 Nations (2022-2023)
- Figure 3: Comparison: Crude Oil Price to Food Price Index (1990-2018)
- Figure 4: Brent Crude & Gasoline Prices Relative to Food Staples (2019-2023)
- Figure 5: Percent Change in CA GDP to Percent Change in U.S. GDP (1982-2023)
- Figure 6: Percent Change in CA GDP to Percent Change in CA Oil Field Production (1998-2022)
- Figure 7: California: Gross Domestic Product from Oil & Gas Extraction (1998-2022)
- Figure 8: Percent of Oil Production by Top Producing U.S. State (2023)
- Figure 9: California Sees Four-Decade Decline in Crude Production
- Figure 10: Comparison: Annual Percentage Change in Oil Field Production for PADD 5 - CA and U.S. (1991-2022)
- Figure 11: Comparison: Percentage Composition of PADD 5 & CA Oil Field Production to Total U.S. Oil Field Production (1990-2022)
- Figure 12: Comparison of Product Types Per Barrel - CA to U.S.
- Figure 13: CDTFA Net Taxable Gasoline Sales by Calendar Year (2001-2024(e))
- Figure 14: Annual Percentage Change in CA Gasoline Consumption as Compared to Annual Percentage Change in Total U.S. Gasoline Consumption (1971-2022)
- Figure 15: California Alaska Oil Imports (1982-2023)
- Figure 16: California: Changes in Foreign Oil Imports, U.S. Alaska Imports & CA Filed Production (1990-2023)
- Figure 17: California Imports: Percentage Composition by Source (1982-2023)

- 1 Figure 18: Comparison: Selected Ranking for Social, Economic & Corruption for  
2 California Oil Imports (2023/2024)
- 3 Figure 19: Fragile States Index Ranking (Selected CA Sources of Foreign Imports)
- 4 Figure 20: Human Rights Index
- 5 Figure 21: World Crude Oil Prices (2008-2024)
- 6 Figure 22: Average Brent Crude Oil Prices by Year (2015-2024)
- 7 Figure 23: Crude Oil Prices and Key Geopolitical and Economic Events (1970-2024)
- 8 Figure 24: California Crude Oil Cost as a Percent of Avg. Retail Gasoline Price (1999-  
9 2023)
- 10 Figure 25: Estimated Sable Platform Production Capacity
- 11 Figure 26: Estimated Sable Breakeven Cost of Production Comparison
- 12 Figure 27: Sable Customers and Selling Markets
- 13 Figure 28: Sable Pipelines and Capacities
- 14 Figure 29: Estimated Economic Impact of Sable Production on CA State, County &  
15 Local Revenues
- 16 Figure 30: Estimated Economic Impact of Sable Production on Employment, Wages,  
17 and Earnings
- 18 Figure 31: Estimated Potential influence on California oil refinery prices of crude  
19 stock oil
- 20 Exhibit A: Resume of Michael A. Mische

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1  
2 **I. INTRODUCTION AND QUALIFICATIONS**

3 **A. Assignment and Scope of Work Performed**

4 1. I have been retained as an expert on certain aspects of the oil and gas industry  
5 for Sable Offshore Corp., a Delaware corporation, and its three offshore platforms, and Pacific  
6 Pipeline Company, a Delaware corporation (“Plaintiffs” or collectively, “Sable”) with specific  
7 reference to Las Flores Pipelines CA-324 and CA-325 (collectively the “Las Flores Pipeline  
8 System”) in matters regarding the Center for Biological Diversity and Wishtoyo Foundation’s  
9 efforts to challenge the California Office of the State Fire Marshal’s approval of modified  
10 regulatory requirements, known as “State Waivers,” to Sable.<sup>1</sup> I have based my analysis and  
11 have formulated my conclusions and opinions on my academic and professional training and  
12 experiences, and would and could testify in court on my analysis and to these conclusions and  
13 opinions. I make this declaration and provide the opinions stated below based upon my  
14 experience and my personal knowledge and would and could testify to the matters contained  
15 herein.

16 2. The scope of work for which I was retained involved the collection, assessment,  
17 and structuring of data necessary to perform an economic analysis to determine why the  
18 production of oil from Sable’s offshore platforms and use of its Las Flores Pipeline System  
19 would not irreparably harm the public and why preventing the use of the Las Flores Pipeline  
20 System to carry Sable’s production to market will instead irreparably harm the citizens of  
21 California, including the residents of Santa Barbara County. In addressing the scope and  
22 performing the work of this assignment, I interrogated data and various literature and  
23 analyzed a series of pertinent issues, including but not limited to:

- 24 a. Describing the general economic behavior of the oil and gas industry.  
25 b. Describing the historical and current status of oil production in the state  
26 of California.

27 <sup>1</sup> *Center for Biological Diversity and Wishtoyo Foundation v. California Department of Forestry and*  
28 *Fire Protection, et al.* (Santa Barbara Sup. Ct. April 15, 2025), Case No. 25CV02244.

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- c. Describing California's in-state oil production and its dependency on foreign, non-U.S. oil sources.
- d. Estimating the costs of imports of non-U.S. oil from foreign sources to California.
- e. Determining the potential economic impact that the addition of Sable oil production from its three offshore platforms and the use of its Las Flores Pipeline System could potentially have on in-state oil production and overall California oil supplies.
- f. Comparing the potential breakeven of Sable oil production from its three offshore platforms and the use of its Las Flores Pipeline System at variable production scale, as compared to other California in-state producers and offshore producers.
- g. Determining to which markets Sable oil production from its three offshore platforms and the use of its Las Flores Pipeline System could potentially represent the most viable for Sable to sell or trade its oil.
- h. Assessing the capacity and capacity utilization of each of Sable's pipelines (Line CA-324 and Line CA-325) for the transporting of oil produced by Sable's three offshore platforms to its potential markets.
- i. Estimating the reserves, capacities, and long-term viability of each of Sable's platforms (wells) for oil production.
- j. Comparing the total estimated aggregated GHG emissions by Sable from the production of oil from its three offshore platforms to other comparable in-state sources and to comparable non-U.S. crude oil sources, inclusive of maritime vessel transportation.
- k. Estimating and describing the potential direct and indirect economic impact of oil production based on Sable's three offshore platforms and

1 the use of its Las Flores Pipeline System on California state revenues, and  
2 Santa Barbara, Kern, and San Luis Obispo Counties.

- 3 1. Estimating and describing the potential direct and indirect employment  
4 impact of oil production based on Sable’s three offshore platforms and  
5 the use of its Las Flores Pipeline System, on Santa Barbara, Kern, and  
6 San Luis Obispo Counties.

7 My work and the opinions expressed herein are restricted to the performance of this  
8 assignment and of the scope of work performed described above, and I express no opinion on  
9 any other matters that are external to the purview of this Assignment and Scope of Work  
10 Performed.

11 **B. Qualifications and Background**

12 3. I am an Associate Professor of Management and Professional Practice at the  
13 Marshall School of Business, University of Southern California (“USC”) in Los Angeles, CA.  
14 I am currently also a Co-Founder and Chairman of the Board of Synergy Consulting Group,  
15 Inc., a management consulting firm. I hold a B.S. degree with honors in finance and  
16 economics from New York University and an MBA from Stern School of Business, New York  
17 University. I also hold an MS degree in Federal Taxation from Golden Gate University and a  
18 certification in AI from the Massachusetts Institute of Technology.

19 4. I have over 40 years of experience in the management consulting industry and  
20 28 years in higher education. Prior to joining the USC faculty, I had two decades of  
21 experience in the management consulting industry. From 1983 to 1992, I worked at KPMG,  
22 one of the largest global accounting and consulting firms in the world, and eventually became  
23 one of the youngest consulting partners (*i.e.*, “Principals”) elected in the history of KPMG.  
24 At KPMG, I was a member of the Practices & Methods Review Committee. My practice  
25 focused on, among other things, strategy and transformation, transaction management  
26 services, and innovation and advanced technologies. From 1991 to 1993, I also served as a  
27 Principal of Management Consulting Services at A.T. Kearney, one of the leading  
28

1 management consulting firms in the world. From 1995 to 1997, I served as a consultant to the  
2 senior leadership of Andersen Consulting (now Accenture) for the development of several  
3 practice methodologies related to process transformation and innovation. I have served as  
4 Chairman of the Board since 1993 and CEO from 1995 through 2016 for Synergy Consulting  
5 Group, Inc. Throughout my consulting career, I have led and managed numerous consulting  
6 projects for a variety of clients in the private, public, and non-profit sectors, many of which  
7 involved benefit analysis and economic impact of strategies and strategic investments. I have  
8 consulted with a variety of industries and organizations, including Fortune 100 companies,  
9 elite management consulting firms and investment banks, national, state, and local  
10 governments, foreign governments, and heads of state and key policymakers.

11 5. Since becoming a faculty member at USC in 1997, I have taught numerous MBA  
12 courses on the management consulting industry and strategic change, including, among  
13 others, The Business of Energy in the 21<sup>st</sup> Century, Strategic Innovation & Change,  
14 Management Consulting, Strategic Transformation & Renewal, Case Analysis for  
15 Consultants, Organizational Behavior, and Leading High-Performance Teams. I am also  
16 responsible for USC's Certificate in Management Consulting Program and am a senior  
17 advisor to USC Management Consulting and Strategy Club, the largest club in the MBA  
18 program. I have received the Management and Organization Department Service Excellence  
19 Award and the Marshall Golden Apple Teaching Award. I have published eight books on  
20 management, organization, and consulting and have been cited in over 300 articles,  
21 interviews, reviews, and studies. I have also served as a material or expert witness several  
22 times. My academic and research interests in the oil and gas industry span over 50 years and  
23 began in October 1973 with the Arab Oil Embargo of the United States when I was a student  
24 at New York University.

25 6. A detailed list of my experience, publications, interviews, and prior expert work,  
26 including a list of my testimony in the past four years is included, as a true and correct copy,  
27 as **Exhibit A** to this report.  
28

1           **C.     Materials and Evidence Considered**

2           7.     Addressing the objectives required extensive analysis of data and comparative  
3 analytical methods. The research involved in this work and in supporting the opinions  
4 expressed herein is widely available and includes but is not limited to verifiable sources such  
5 as the California Energy Commission, U.S. Energy Information Agency, Bloomberg, U.S.  
6 Department of Energy, Sable SEC filings, International Energy Agency, Plains All American  
7 Reports Fourth-Quarter and Full-Year 2023 Results; Announces 2024 Guidance, Oil & Gas  
8 Journal, American Petroleum Institute, the California Department of Tax and Fee  
9 Administration, the U.S. EPA, California Air Resources Board, Statista, The Federal Reserve  
10 Bank, the California Attorney General’s Office, the California Legislative Analyst’s Office,  
11 U.S. Department of Interior, Rystad Energy, Bureau of Labor Statistics, the U.S. Oil and Gas  
12 Association, and a number of scholarly research articles and papers.

13           8.     In addition to the public materials, I relied upon the evidential and supporting  
14 documents associated with this action. By example and without limitation, these materials  
15 included Sable Investor Presentation, Cultivation Cap & Eligible Business License Applicants  
16 Lists|Santa Barbara County, CA., “Oil & Gas | CA State Lands Commission” found at  
17 <https://www.slc.ca.gov/oil-gas/>.

18           **D.     Compensation**

19           9.     Fee and compensation arrangements for this work are based on time and  
20 materials. My hourly rate for this assignment is \$1,000.00, and payment for my services does  
21 not depend in any way on the opinions that I form or on the outcome of this matter. I have no  
22 equity interests in Sable Offshore Corp. or any of its affiliates. Furthermore, I have no interests  
23 or conflicts that may be related to any other oil and gas producer or any nation-state that drives  
24 most of its income from oil and gas. Like many people who have professionally managed  
25 pension plans, including those who are members of CalPERS, one of my pension funds may  
26 own the stock of one or several petroleum or petroleum-related companies. In this regard, I  
27 may have a distant and indirect interest, but in all situations, any interests are immaterial and  
28

1 are not pertinent, and do not have any influence on my work and the opinions expressed in  
2 this declaration.

3 **II. SUMMARY OF CONCLUSIONS**

4 10. Based on the data, research into prevailing literature, and my analysis, my  
5 conclusion is that the production of oil from Sable’s offshore platforms and the associated use  
6 of its Las Flores Pipeline System to carry Sable’s production to market will not irreparably  
7 harm the public and will instead benefit the public. For the same reasons, preventing the use  
8 of the Las Flores Pipeline System from carrying Sable’s production to market would  
9 irreparably harm consumers of gasoline, diesel and other byproducts of crude oil.

10 11. California is facing an energy crisis and has the highest retail gasoline and  
11 aviation fuel costs in the United States. On July 1, retail gasoline prices increased, further  
12 stressing consumers who live and work in a state with the highest housing and general cost  
13 of living. The addition of Sable’s production oil from its three offshore platforms and the use  
14 of its Las Flores Pipeline System would increase in-state oil production to 360,000 barrels a  
15 day at a time when California is facing extreme uncertainty and price hikes in its fossil fuel  
16 energy sector. The addition of Sable’s production and the use of its Las Flores Pipeline  
17 System would provide the foundation energy security and price certainty. California’s current  
18 in-state crude production is just about 310,000<sup>2</sup> barrels per day, which provides less than a  
19 quarter of the state’s total daily crude demand. The remaining supply, close to 950,000 barrels,  
20 is imported from foreign nations including Ecuador, Iraq, and Saudi Arabia.<sup>3</sup> Raising in-state  
21 output to a 360,000 barrels a month, which could be achieved through SYU production and  
22 operation of the Las Flores Pipelines, would allow California to operate more independently  
23

24 \_\_\_\_\_  
25 <sup>2</sup> Commission, C. E. (n.d.). Annual Oil Supply Sources To California Refineries. California Energy  
26 Commission. [https://www.energy.ca.gov/data-reports/energy-almanac/californias-petroleum-  
market/annual-oil-supply-sources-california](https://www.energy.ca.gov/data-reports/energy-almanac/californias-petroleum-market/annual-oil-supply-sources-california)

27 <sup>3</sup> Commission, C. E. (n.d.-b). Foreign Sources of Crude Oil Imports to California 2020. California  
28 Energy Commission. [https://www.energy.ca.gov/data-reports/energy-almanac/californias-petroleum-  
market/foreign-sources-crude-oil-imports](https://www.energy.ca.gov/data-reports/energy-almanac/californias-petroleum-market/foreign-sources-crude-oil-imports)

1 and would reduce the State’s exposure to geopolitical risks and moderate exposures to spot  
2 market price hikes that adversely affect California consumers.

3       12. The production of oil from Sable’s three offshore platforms and the use of  
4 Sable’s Las Flores Pipeline System to transport its offshore production to market would have  
5 a favorable economic impact on California’s overall energy situation, as well as have a  
6 favorable influence on local employment and tax revenues and consumer retail gasoline,  
7 diesel, and aviation fuel prices, and would improve and strengthen California’s energy and  
8 economic security. Furthermore, the addition of Sable oil production to the market would  
9 have ancillary benefits reaching across state lines into Nevada and Arizona and would, in  
10 effect, strengthen and improve national defense readiness for U.S. military forces stationed in  
11 California, Nevada, and Arizona that are reliant on California refineries for aviation, gasoline  
12 and diesel fuels.

13       13. Allowing Sable to transport SYU-produced crude to market through the Las  
14 Flores Pipeline System would significantly benefit the public by serving as the economic  
15 “backbone” while navigating the economic uncertainties and risks associated dependency on  
16 non-U.S. foreign oil suppliers of energy transformation in support of California’s ambitions  
17 for energy transformation.

1 **III. ANALYSIS**

2 **A. Understanding Petroleum**

3 14. Petroleum is derived from crude oil. Crude oil, or simply ‘crude,’ is a fossil fuel  
4 and the product of millions of years of geological activity and organic decay. Oil deposits are  
5 found in the ground, either onshore or offshore, at the bottom of an ocean, lake, or river. To  
6 locate deposits, oil producers expend considerable effort and funds to explore and “discover”  
7 petroleum deposits, which are reservoirs, pockets or patches of oil, or oil fields. Once located,  
8 the oil must be extracted, usually via drilling.<sup>4</sup> The extracted oil is then transported via  
9 maritime vessels, pipelines, trucks, or rail tankers to a processing facility, which prepares the  
10 petroleum for refinement. The refining process turns crude oil into various products, such as  
11 gasoline, diesel fuel, aviation fuels, heating oils, and other derivatives.

12 15. The standard measure for crude oil is a barrel, which contains 42 gallons or 159  
13 liters. As a general rule and as an informal estimate, one gallon of oil produces between .47  
14 and .67 gallons of refined gasoline. Stated differently, one barrel of oil (42 gallons) yields 17-  
15 28 gallons of gasoline. On average, a barrel of oil, once refined, will yield 45 gallons of total  
16 product or about 1.1 times the original volume.<sup>5</sup> Additionally, a single barrel of crude oil  
17 typically produces 138,095 Btu of energy.<sup>6</sup>

18 16. Not all oil is alike, and there are multiple types of crude that define its quality  
19 and grade. Therefore, no two barrels of oil are exactly identical. Petroleum is characterized  
20 by its origin and its API rating.<sup>7</sup> A combination of factors — including geology, location,

21 <sup>4</sup> *Petroleum*. (n.d.). <https://education.nationalgeographic.org/resource/petroleum>

22 <sup>5</sup> EIA, *Petroleum Supply Monthly*, April 2019

23 <sup>6</sup> *Facts about Oil*. (2020). Www3.Uwsp.edu. [https://www3.uwsp.edu/cnr-  
24 ap/KEEP/Documents/Activities/Energy%20Fact%20Sheets/FactsAboutOil.pdf](https://www3.uwsp.edu/cnr-ap/KEEP/Documents/Activities/Energy%20Fact%20Sheets/FactsAboutOil.pdf)

25 <sup>7</sup> API Definition: According to the American Petroleum Institute, the API rating is “An arbitrary scale  
26 expressing the gravity or density of liquid petroleum products.” The higher the API gravity (rating),  
27 the lighter the oil. In general, light oil crude has an API rating of 38 degrees or more. Intermediate or  
28 medium grade oil has an API gravity rating of 22 to 38 degrees. Crude oil with API ratings of 38 and  
above are considered heavy and extra heavy. The characterization of oil crude as “sweet” or “sour” is  
related to its sulfur content. See, *Table Definitions, Sources, and Explanatory Notes*. (n.d.).  
Www.eia.gov. [https://www.eia.gov/dnav/pet/TblDefs/pet\\_pnp\\_crq\\_tbldef2.asp](https://www.eia.gov/dnav/pet/TblDefs/pet_pnp_crq_tbldef2.asp)

1 chemistry, and climate — makes each type of oil unique, possessing specific properties that  
2 can be refined for intended uses. For example, oil found in Texas can and will be different  
3 than oil in California. The predominant method for assigning a quality rating to crude oil is  
4 “gravity” (viscosity) as defined, measured, and rated using the standard established by the  
5 American Petroleum Institute (API).<sup>8</sup> Crude oils that rate 35-45 on the API scale are called  
6 “light crude” and are considered the highest quality and yield the highest value products from  
7 refining. Some crude oils are “sour and heavy to extra heavy,” making them more costly to  
8 produce and refine into end products. In contrast, other crudes are “sweet and light/lite,”  
9 which are less expensive to refine.

10 17. Crude oils rated at 15 or lower are characterized as “extra-heavy” and typically  
11 require more refining processes, are more costly to refine, and yield lower outputs. Extra  
12 heavy crudes are typically used for purposes other than gasoline, diesel, and jet fuel  
13 production. Crude oils with high sulfur content are generally referred to as “sour,” while those  
14 with lower sulfur content are characterized as “sweet.” Hence, in discussing oil, the term  
15 “Light sweet crude” would be used to describe an oil that has a high API rating and low sulfur  
16 content. The quality and origin of oil also influence the amounts of greenhouse emissions, as  
17 do extraction processes, transportation and distribution methods, and refining efficiencies  
18 associated with the oil and the production of end products, such as gasoline. **California**  
19 **generally produces, and its refineries use, heavier crudes.**  
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27 <sup>8</sup> *Oil categories*. (n.d.). [https://www.api.org/products-and-services/engine-oil/eolcs-categories-and-](https://www.api.org/products-and-services/engine-oil/eolcs-categories-and-classifications/oil-categories)  
28 [classifications/oil-categories](https://www.api.org/products-and-services/engine-oil/eolcs-categories-and-classifications/oil-categories)

Figure 1

California Sources, Grades & Transportation Methods for Crude Oil- 2018 to 2024		
Crude Oil Source	Crude Grade Characteristic	Transportation Method to CA
<b>U.S. DOMESTIC</b>		
CA- Kern	Very Heavy	Pipeline
CA- Midway Sunset	Very Heavy	Pipeline
CA- Berridge	Very Heavy	Pipeline
CA- San Ardo	Very Heavy	Pipeline
CA- Lost Hills	Light Heavy	Pipeline
CA- Offshore	Heavy	Pipeline
CA- Ventura	Light Heavy	Pipeline
CA- Elk Hills	Light Heavy	Pipeline
Alaska- North Slope	Medium	Tanker
Washington State	Gasoline	Tanker
<b>FOREIGN</b>		
Canada	Heavy	Tanker & Rail
Ecuador	Heavy	Tanker
Guyana	Medium/Heavy	Tanker
Russia	Heavy	Tanker
Saudia Arbia	Heavy	Tanker
Iraq	Heavy	Tanker

(Source: <https://www.californiaenergyatlas.com/copy-of-crude-oil>)

18. Generally, oil produced offshore in the Santa Ynez region (Santa Barbara Channel) is heavier crude with low API gravity and consistent with other California crudes. This grade of crude is typically used by California refineries in the production of fuels. Summarized above is a representative sample of the crudes produced in California as compared to the foreign oil imported by California to meet its daily needs.

**B. Economic Role & Impact**

**i. Global**

19. From heating, cooking, and lighting to the manufacturing of cellular telephones, agricultural production, electrical power generation, plastics, asphalt, concrete, medical

1 devices and pharmaceutical products, and alternative energy production, petroleum is  
2 essential to any economy and modern society. Although oil is universally known as a source  
3 of energy, petroleum is used in the manufacturing of fibers, such as polyester and nylon,  
4 certain types of medical devices, the screens that are used in monitors, televisions, cell  
5 phones, computers, cement, asphalt, wind turbines, steel, herbicides, and fertilizers.<sup>9</sup>  
6 Petroleum, in the form of gasoline, diesel, and aviation fuels, is essential to transportation and  
7 the movement of people, products, and food.

8         20. Globally, the amount of oil in the world fluctuates based predominantly on three  
9 factors: (1) consumption (demand), (2) production from existing proven sources, and (3) the  
10 discovery of new oil sources (reserves). For example, in 1960, crude oil reserves were  
11 estimated to be around 291 billion barrels.<sup>10</sup> In 2023, world crude reserves were estimated to  
12 range between 1.5 to 1.73 trillion barrels of oil.<sup>11 12 13</sup> Reserve oil is petroleum that has been  
13 discovered and properly approximated (proven) but not yet been harvested (produced). The  
14 majority of proven reserves, around 79%, are located in OPEC member countries.<sup>14</sup>

15         21. In 2023, around 101.81 million barrels of oil were produced globally per day.<sup>15</sup>  
16 For perspective, around 1.2 million barrels of oil are consumed on Earth per second.<sup>16</sup> For  
17

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18 <sup>9</sup> IOGP. (2022, October 11). *Oil and gas in everyday life*.  
19 <https://www.iogp.org/workstreams/advocacy/oil-natgas-in-everyday-life/>

20 <sup>10</sup> Statista. (2024, July 23). *Global crude oil reserves 1960-2023*.  
<https://www.statista.com/statistics/236657/global-crude-oil-reserves-since-1990/>

21 <sup>11</sup> Ibid.

22 <sup>12</sup> Chen, J. (2024, July 25). Oil reserves. Investopedia. <https://www.investopedia.com/terms/o/oil-reserves.asp#:~:text=Oil%20reserves%20are%20an%20estimate,oil%20reserves%20in%20the%20world.>

23 <sup>13</sup> *World Oil Statistics - Worldometer*. (n.d.). <https://www.worldometers.info/oil/>

24 <sup>14</sup> OPEC. (2024). *OPEC : OPEC Share of World Crude Oil Reserves*. Opec.org; Organization of the  
25 Petroleum Exporting Countries. [https://www.opec.org/opec\\_web/en/data\\_graphs/330.htm](https://www.opec.org/opec_web/en/data_graphs/330.htm)

26 <sup>15</sup> *Frequently Asked Questions (FAQs) - U.S. Energy Information Administration (EIA)*. (2024, April  
11). [Www.eia.gov. https://www.eia.gov/tools/faqs/faq.php?id=709&t=6.](https://www.eia.gov/tools/faqs/faq.php?id=709&t=6)

27 <sup>16</sup> Calculation based on 86,400 seconds per day and 2023 consumption of 100.3 million barrels of oil  
28 a day.

1 2024, world production increased by around 1.2% to 103 million barrels a day.<sup>17</sup> According  
2 to the IEA, the energy sector, including the oil and gas industry, employs 65 million people  
3 worldwide (2019 est.), or about 2% of all global employment.<sup>18</sup> Oil represents the largest  
4 employment sector, with 8 million or 12% of total employment in the industry.<sup>19</sup> On a  
5 comparative basis, the energy sector has more highly skilled labor as a percentage of its labor  
6 force, 45%, than the overall average of all industries, which is 25% for highly skilled labor.<sup>20</sup>

7  
8 22. According to the U.N., in 2023, a total of 12.3 billion tons of cargo was  
9 transported using maritime vessels, which represents around 80% of all global trade.<sup>21</sup> <sup>22</sup>

10 **Maritime tankers burn bunker (heavy oil) fuels for propulsion, airplanes burn aviation**  
11 **fuels, trucks are powered by diesel fuels, mass-scale agricultural production is based on**  
12 **fossil fuels, and over 60% of automotive transportation is reliant on fossil fuels.** Around  
13 49% to 50% of electrical power generation in the U.S. is derived from fossil fuels.<sup>23</sup>

14 **Figure 2**

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19 <sup>17</sup> *Frequently Asked Questions (FAQs) - U.S. Energy Information Administration (EIA)*. (2024, April  
11). [www.eia.gov](https://www.eia.gov/tools/faqs/faq.php?id=709&t=6). <https://www.eia.gov/tools/faqs/faq.php?id=709&t=6>.

20 <sup>18</sup> *World Energy Employment*. (n.d.). [https://iea.blob.core.windows.net/assets/a0432c97-14af-4fc7-](https://iea.blob.core.windows.net/assets/a0432c97-14af-4fc7-b3bf-c409fb7e4ab8/WorldEnergyEmployment.pdf)  
21 [b3bf-c409fb7e4ab8/WorldEnergyEmployment.pdf](https://iea.blob.core.windows.net/assets/a0432c97-14af-4fc7-b3bf-c409fb7e4ab8/WorldEnergyEmployment.pdf)

22 <sup>19</sup> *World Energy Employment*. (n.d.). [https://iea.blob.core.windows.net/assets/a0432c97-14af-4fc7-](https://iea.blob.core.windows.net/assets/a0432c97-14af-4fc7-b3bf-c409fb7e4ab8/WorldEnergyEmployment.pdf)  
23 [b3bf-c409fb7e4ab8/WorldEnergyEmployment.pdf](https://iea.blob.core.windows.net/assets/a0432c97-14af-4fc7-b3bf-c409fb7e4ab8/WorldEnergyEmployment.pdf)

24 <sup>20</sup> *World Energy Employment*. (n.d.). [https://iea.blob.core.windows.net/assets/a0432c97-14af-4fc7-](https://iea.blob.core.windows.net/assets/a0432c97-14af-4fc7-b3bf-c409fb7e4ab8/WorldEnergyEmployment.pdf)  
25 [b3bf-c409fb7e4ab8/WorldEnergyEmployment.pdf](https://iea.blob.core.windows.net/assets/a0432c97-14af-4fc7-b3bf-c409fb7e4ab8/WorldEnergyEmployment.pdf)

26 <sup>21</sup> UNCTAD. (2024, October 22). *Review of Maritime Transport 2024*. UNCTAD.  
27 <https://unctad.org/publication/review-maritime-transport-2024>.

28 <sup>22</sup> statista. (2017). *Topic: Ocean Shipping*. [www.statista.com](https://www.statista.com/topics/1728/ocean-shipping/); Statista.  
<https://www.statista.com/topics/1728/ocean-shipping/>

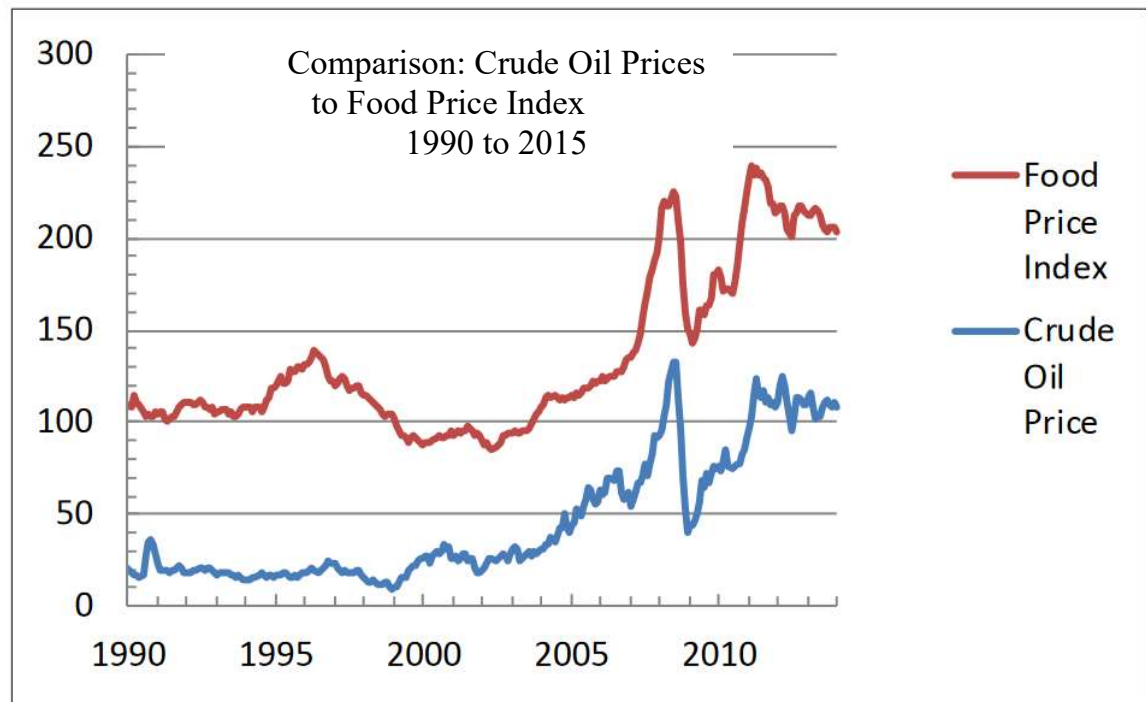
<sup>23</sup> U.S. Energy Information Administration. (2024, July 15). *U.S. Energy Facts Explained*. [Eia.gov](https://www.eia.gov/energyexplained/us-energy-facts/);  
U.S. Energy Information Administration. <https://www.eia.gov/energyexplained/us-energy-facts/>

2022/23- GLOBAL PRODUCTION & CONSUMPTION- TOP 10 NATIONS					
WORLD PRODUCTION- 2023			WORLD CONSUMPTION- 2022		
Nation	Million of Barrels per day	Percent of World Total	Nation	Million of Barrels per day	Percent of World Total
United States	21.91	22%	United States	20.01	20%
Saudi Arabia	11.13	11%	China	15.15	15%
Russia	10.75	11%	India	5.05	5%
Canada	5.76	6%	Russia	3.68	4%
China	5.76	6%	Saudi Arabia	3.65	4%
Iraq	4.42	4%	Japan	3.38	3%
Brazil	4.28	4%	Brazil	3.03	3%
United Arab Emirates	4.16	4%	South Korea	2.55	3%
Iran	3.99	4%	Canada	2.41	2%
Kuwait	2.91	3%	Germany	2.18	2%
Total Top 10	74.59	73%	Total Top 10	61.08	61%
<b>World Total-Production</b>	<b>101.81</b>		<b>World Total-Consumption</b>	<b>99.95</b>	

(Source: EIA. <https://www.eia.gov/tools/faqs/faq.php?id=709&t=6>)

23. Petroleum products, such as gasoline and diesel fuels, are significant components in the determination of the cost of food production and retail grocery prices. As indicated in the Figure below, as gasoline prices increased, the cost of staples such as milk, ground beef, and sugar also increased. As was indicated during the inflationary period of 2021 to 2024, when general inflation outpaced real wages and peaked at 9.1%, and crude oil and gasoline prices peaked at a 40-year high, food prices for consumers increased.

**Figure 3**



1 (Source: <https://extension.psu.edu/fuel-ethanol-hero-or-villain#:~:text=Gasoline%20is%20not%20water%20soluble,performance%20if%20not%20dealt%20with>)

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4 24. Crude oil prices have a casual correlation to food prices. When crude prices  
5 increase and stay elevated for protracted periods, as they were during the 2020 to 2024 period,  
6 food prices, as well as overall costs, tend to also increase. As the research literature indicates,  
7 “oil and food price volatility causes macroeconomic instability and deteriorates the living  
8 conditions, particularly in developing countries where poor people spend most of their income  
9 to buy food.”<sup>24</sup> Thus, when the price of crude oil and its related products, such as gasoline,  
10 increases, the price increases have a regressive and disproportionate impact on lower and  
11 fixed-income groups, as well as working-class families.

12 25. Longitudinal studies of the influence of crude oil on food prices indicate  
13 “statistically significant evidence in favor of the existence of a long-run causal relationship,  
14 solely running from oil prices to food prices.”<sup>25</sup> One study calculated that a 1% increase in  
15 the crude oil price index results in food prices increasing by .08%.<sup>26</sup>

16 **Figure 4**

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24 <sup>24</sup> Z. Zhang, L. Luanne, E. Cesar, W. Michael Food versus fuel: What do prices tell us? *Energy Policy*,  
38 (1) (2010), pp. 445-451.

25 <sup>25</sup> Karakotsios, Achillefs, et al. “The Dynamic Linkages between Food Prices and Oil Prices. Does  
26 Asymmetry Matter?” *The Journal of Economic Asymmetries*, vol. 23, June 2021, p. e00203,  
<https://doi.org/10.1016/j.jeca.2021.e00203>. Accessed 9 June 2021.

27 <sup>26</sup> *Asymmetries*, vol. 23, June 2021, p. e00203, <https://doi.org/10.1016/j.jeca.2021.e00203>. Accessed  
28 9 June 2021.

BRENT CRUDE & GASOLINE PRICES RELATIVE TO FOOD STAPLES	
Household Expenditures on Gasoline, Energy & Utilities	2019-23 % Change
Average Price of Brent Crude Oil	29.08%
Average Retail Gasoline Price-	20.77%
Average Price for #2 Diesel Fuel- CA.	37.36%
Average Retail Price of Gasoline- CA.	33.06%
Average Cost of Electricity- Residential Kilowatt	23.83%
Average Cost of Milk - July	41.78%
Average Price of Ground Beef- 1 lbs. - July	34.26%
Average Cost of Butter	12.27%
Average Cost of Ice Cream (.5 Gallon)	25.05%
Average Cost of Sugar- Per lbs.	107.42%

(Source: Author)

26. Increases in crude oil and crude oil product prices are of particular concern in California. Gasoline prices are highly correlated with crude oil prices, and in California, the costs are amplified by tight supplies and regulations. California's average retail gasoline prices, which are correlated to the price of crude oil, are routinely 40% to 50% higher than the national average. Not surprisingly, California retail gasoline prices are also considerably higher than its neighboring states. **Californians pay the highest gasoline prices in the United States**, and they went up on July 1, 2025, as a result of the state excise tax, new Low Carbon Fuel Standard, and ABX2-1, requiring refineries to maintain stock of finished gasoline, in addition to crude oil. Significantly, any disruption or interruption of crude oil supplies to the surviving California refineries will have a detrimental effect on consumer prices and a regressive and disproportionately harsh impact on lower and fixed income Californians.

27. . At 18.9% of its 39 million inhabitants, California has the highest poverty rate in the U.S. and has 24%, or over 187,000, of the total estimated 771,500 homeless people in the U.S. <sup>27</sup> <sup>28</sup> Furthermore, California's cost of living is around 12% than all other states,

<sup>27</sup> Torres, Mauricio. "New Census Data Show California Poverty Soared to Alarming High Levels in 2023." *California Budget and Policy Center*, 10 Sept. 2024, [calbudgetcenter.org/news/new-census-data-show-california-poverty-soared-to-alarming-high-levels-in-2023/](http://calbudgetcenter.org/news/new-census-data-show-california-poverty-soared-to-alarming-high-levels-in-2023/).

<sup>28</sup> Cremin, Sean. "Homelessness Hits Record High in California, Jumps Dramatically in Rest of US." *Public Policy Institute of California*, 25 Mar. 2025, [www.ppic.org/blog/homelessness-hits-record-high-in-california-jumps-dramatically-in-rest-of-us/](http://www.ppic.org/blog/homelessness-hits-record-high-in-california-jumps-dramatically-in-rest-of-us/).

1 making it the highest cost of living in the U.S.<sup>29</sup> It’s not just gasoline that Californians pay a  
2 premium for. According to California’s own Legislative Analyst’s Office (“LAO”),  
3 greenhouse emissions policies have contributed to the second highest monthly electricity rates  
4 for residential service in the U.S.<sup>30</sup> For the 2019 to 2024 period, the LAO reports that  
5 residential electrical utility rates in California increased by 47%. In the Golden State,  
6 Californians monthly utility bills average \$438.<sup>31 32</sup>

7 **ii. United States**

8 28. The U.S. oil and gas industry is an extensive, integral, and critical part of the  
9 U.S. economy and is vital to national defense and economic security. At \$1.7 trillion, the oil  
10 and gas industry comprises around **8% of the U.S. GDP** and employs around 11.3 million  
11 people, representing 5.6% of total U.S. employment.<sup>33</sup> An additional 3.4 million jobs are  
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17 <sup>29</sup> Pino, Ivana. “This Map Compares the Cost of Living in Every State.” *Yahoo Finance*, 28 Feb. 2025,  
18 [finance.yahoo.com/personal-finance/banking/article/cost-of-living-by-state-164246058.html](https://finance.yahoo.com/personal-finance/banking/article/cost-of-living-by-state-164246058.html).

19 <sup>30</sup> Spady, A. (2025, January 8). California’s “ambitious” policies to reduce greenhouse gases  
20 drive surge in electricity costs: report. *Fox Business*. <https://www.foxbusiness.com/fox-news-politics/californias-policies-greenhouse-gases-electricity-surge>

21 <sup>31</sup> <https://www.foxbusiness.com/fox-news-politics/californias-policies-greenhouse-gases-electricity-surge>

22 <sup>32</sup> Carey, R. (n.d.). *How much does it cost to live in California? Housing, utilities, and more.*  
23 Unbiased. <https://www.unbiased.com/discover/banking/what-is-the-cost-of-living-in-california#:~:text=California's%20average%20cost%20of%20living,on%20top%20of%20your%20finances.>

24  
25 <sup>33</sup> American Petroleum Institute. (2019). *Oil & Natural Gas Contribution to U.S. Economy Fact Sheet.*  
26 *Api.org*. <https://www.api.org/news-policy-and-issues/taxes/oil-and-natural-gas-contribution-to-us-economy-fact-sheet>

27 See also, *New analysis: American-Made natural gas and oil drives U.S. economic recovery, Strengthens all industries.* (2021b, July 20). <https://www.api.org/news-policy-and-issues/news/2021/07/20/2021-pwc-analysis>

1 associated with oil and gas affiliated industries and businesses.<sup>34</sup> In the U.S., the oil and gas  
2 industry hourly wages, on average, are around 85% higher than the national average.<sup>35</sup>

3  
4 29. The oil and gas industry accounts for around 16% of total capital expenditures  
5 annually in the U.S.<sup>36</sup> In contrast, the transportation and healthcare sectors account for 5.3%  
6 and 6.3% of capital expenditures, respectively.<sup>37</sup> In the U.S., the EIA estimates that Americans  
7 spent around \$1.0 trillion on energy, of which \$503 million was related to gasoline, jet fuel,  
8 and diesel fuels in 2020, which collectively accounts for 4.8% of the U.S. GDP.<sup>38</sup> According  
9 to a Stanford University report, between 2020 and 2023, the global energy sector attracted  
10 around \$9.8 billion in private investment in AI, with over half of that investment occurring in  
11 the United States.<sup>39</sup>

12 30. For 2022, the EIA reports that the U.S. has proven reserves of at least 48.3 billion  
13 barrels of oil.<sup>40</sup> Comparatively, **the United States has the 9<sup>th</sup> largest proven oil reserves in**  
14 **the world.** However, U.S. technologies and the opening of previously closed areas could  
15 significantly increase U.S.- proven reserves. Based on current and planned consumption rates

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16 <sup>34</sup> *New analysis: American-Made natural gas and oil drives U.S. economic recovery, Strengthens all*  
17 *industries.* (2021, July 20). [https://www.eia.gov/news-policy-and-issues/news/2021/07/20/2021-pwc-](https://www.eia.gov/news-policy-and-issues/news/2021/07/20/2021-pwc-analysis)  
18 [analysis](https://www.eia.gov/news-policy-and-issues/news/2021/07/20/2021-pwc-analysis)

19 <sup>35</sup> American Petroleum Institute. (2019). *Oil & Natural Gas Contribution to U.S. Economy Fact Sheet.*  
20 [Api.org. https://www.eia.gov/news-policy-and-issues/taxes/oil-and-natural-gas-contribution-to-us-](https://www.eia.gov/news-policy-and-issues/taxes/oil-and-natural-gas-contribution-to-us-economy-fact-sheet)  
21 [economy-fact-sheet](https://www.eia.gov/news-policy-and-issues/taxes/oil-and-natural-gas-contribution-to-us-economy-fact-sheet)

22 <sup>36</sup> American Petroleum Institute. (2019). *Oil & Natural Gas Contribution to U.S. Economy Fact Sheet.*  
23 [Api.org. https://www.eia.gov/news-policy-and-issues/taxes/oil-and-natural-gas-contribution-to-us-](https://www.eia.gov/news-policy-and-issues/taxes/oil-and-natural-gas-contribution-to-us-economy-fact-sheet)  
24 [economy-fact-sheet](https://www.eia.gov/news-policy-and-issues/taxes/oil-and-natural-gas-contribution-to-us-economy-fact-sheet)

25 <sup>37</sup> American Petroleum Institute. (2019). *Oil & Natural Gas Contribution to U.S. Economy Fact Sheet.*  
26 [Api.org. https://www.eia.gov/news-policy-and-issues/taxes/oil-and-natural-gas-contribution-to-us-](https://www.eia.gov/news-policy-and-issues/taxes/oil-and-natural-gas-contribution-to-us-economy-fact-sheet)  
27 [economy-fact-sheet](https://www.eia.gov/news-policy-and-issues/taxes/oil-and-natural-gas-contribution-to-us-economy-fact-sheet)

28 <sup>38</sup> *2020 inflation-adjusted U.S. energy expenditures lowest since 2002.* (n.d.). [Www.eia.gov.](http://www.eia.gov)  
<https://www.eia.gov/todayinenergy/detail.php?id=53620>

<sup>39</sup> Stanford University. (2024). *The 2024 AI Index Report | Stanford HAI.* [Stanford.edu.](https://hai.stanford.edu)  
<https://hai.stanford.edu/ai-index/2024-ai-index-report>

<sup>40</sup> U.S. Energy Information Administration. (2017). *U.S. Crude Oil, Natural Gas, and Natural Gas*  
*Proved Reserves, Year-end 2017.* [Eia.gov.](http://eia.gov) <https://www.eia.gov/naturalgas/crudeoilreserves/>

1 and EIA current estimates, the U.S. has about 290 years of proven and technically recoverable  
2 oil reserves.<sup>41</sup>

3  
4 **C. California Petroleum**

5 **i. Economic Contributions**

6 31. With a \$3.9 trillion economy (GDP), California comprises 14% of the U.S. GDP,  
7 is the nation's largest state economy, and ranks 4<sup>th</sup> (nominal) as the largest economy  
8 globally.<sup>42 43</sup> On a per capita basis, California would be the second-largest economy in the  
9 world.<sup>44</sup> In dollar terms, California's GDP exceeds the GDPs of Italy, the U.K., Canada, and  
10 France.<sup>45</sup> For the 1982 to 2023 period, and on a percentage change basis, California's GDP  
11 outgrew that of the overall U.S. by 1.06 times.<sup>46</sup> As California is the largest state economy in  
12 the nation, it stands to reason that the behavior of California's state economy is highly  
13 correlated with that of the overall U.S. GDP on an annual percentage change basis.<sup>47</sup>

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19 <sup>41</sup> Ier. (2022, June 22). *Global Oil and Gas proved reserves increase in 2021 - IER*. IER.  
20 <https://www.instituteforenergyresearch.org/fossil-fuels/gas-and-oil/global-oil-and-gas-proved-reserves-increase-in-2021/>

21 <sup>42</sup> Duan, J., & Bohn, S. (2024, October 14). *California's Economy*. Public Policy Institute of  
22 California. <https://www.ppic.org/publication/californias-economy/>

23 <sup>43</sup> *California is now the 4th largest economy in the world | Governor of California*. (2025, April 24).  
24 Governor of California. <https://www.gov.ca.gov/2025/04/23/california-is-now-the-4th-largest-economy-in-the-world/>

25 <sup>44</sup> Duan, J., & Bohn, S. (2024, October 14). *California's Economy*. Public Policy Institute of  
26 California. <https://www.ppic.org/publication/californias-economy/>

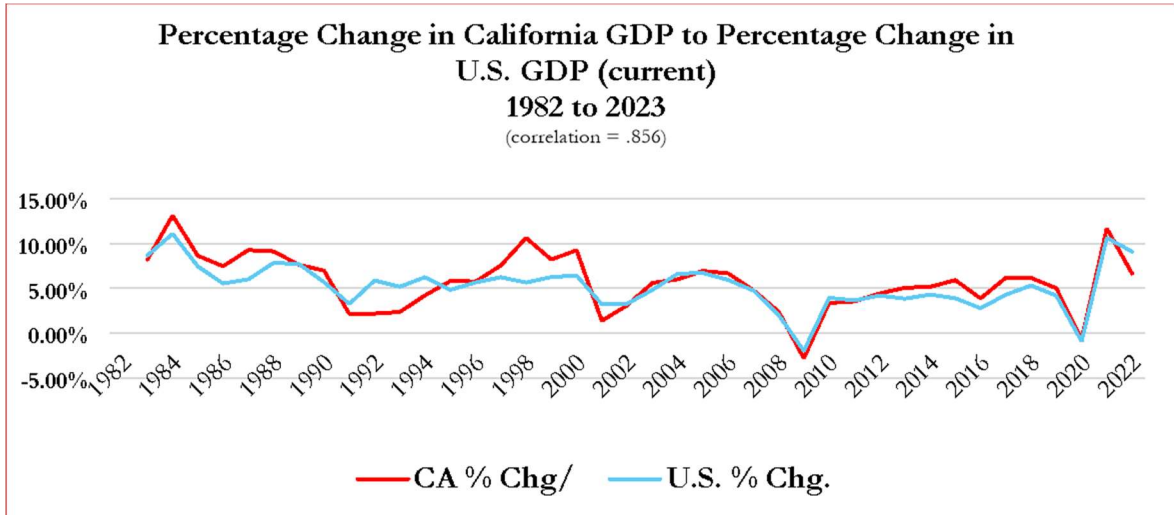
27 <sup>45</sup> Hughes, R. A. (2025, January 6). *If California were a country*. Bull Oak. <https://bulloak.com/blog/if-california-were-a-country/>

28 <sup>46</sup> Author calculation.

<sup>47</sup> Author calculation.

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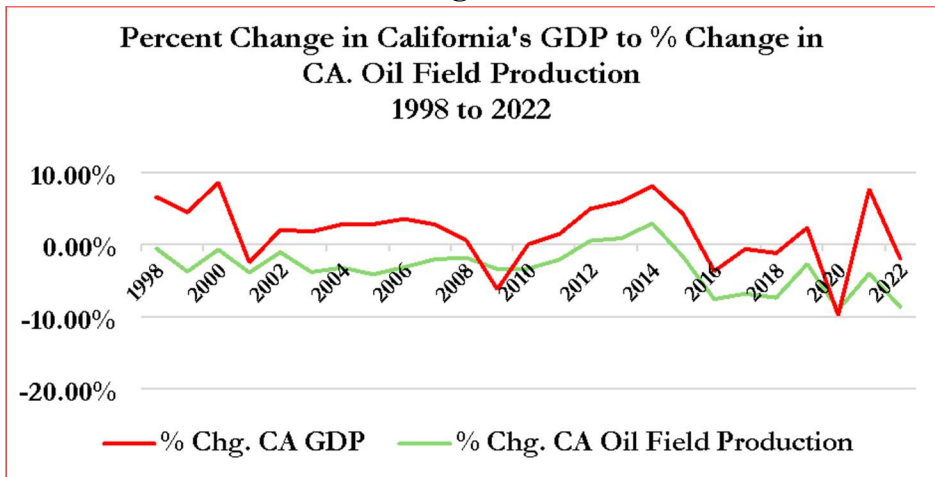
**Figure 5**



(Source: EIA, Fed. Reserve, author)

32. Over the 1998 to 2023 period, although there is some similarity in movement between California's oil field production to its GDP, based on the annual percentage change, the correlation is very low (.11). The low correlation is not unexpected, as oil and gas production has become less significant over the years in California's economy, as in-state production declines.<sup>48</sup>

**Figure 6**

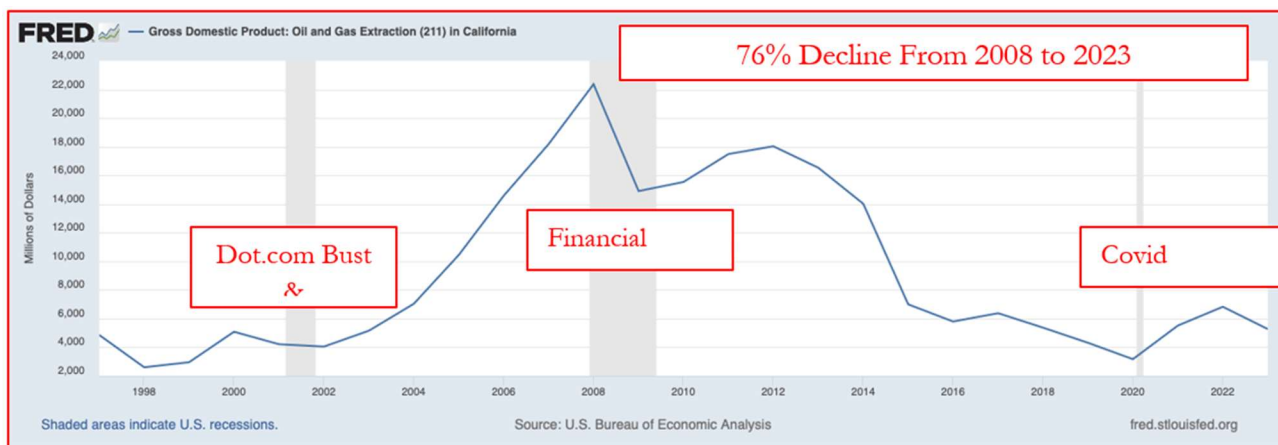


(Source: EIA, Fed. Reserve, author)

<sup>48</sup> Gross Domestic Product: Oil and Gas Extraction (211) in California. (2023). Stlouisfed.org. <https://fred.stlouisfed.org/series/CAOILGASNGSP#>

1 33. For 2022, the oil and gas industry generated around **\$338 billion in total**  
 2 **economic contribution, which comprised around 8% of the Golden State’s GDP.**<sup>49</sup> For  
 3 perspective, professional, financial, and information services at \$520 billion are the largest.<sup>50</sup>  
 4 As indicated in the chart below, oil production contribution to California’s GDP reached a  
 5 historical peak, in absolute dollars, in 2008. Since the 2008 peak, oil production’s contribution  
 6 to California’s GDP, in absolute dollar terms, has declined by 76%, indicating a lesser role in  
 7 the State’s overall economy.<sup>51</sup>

8  
 9 **Figure 7**  
 10 **California: Gross Domestic Product from Oil & Gas Extraction**



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 12  
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 17 (Source: <https://fred.stlouisfed.org/series/CAOILGASNGSP#>)

18  
 19 **ii. Employment**

20 34. Total direct employment affiliated with the oil and gas industry in California is  
 21 estimated to be around **148,700, with indirect employment associated with California’s oil**  
 22  
 23  
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25 <sup>49</sup> <https://wspa.app.box.com/s/2v30dlvt0fbez09irhav001rw19tfh48>

26 <sup>50</sup> *What is the gross domestic product (GDP) in California?* | USAFacts. (n.d.). USAFacts.  
<https://usafacts.org/answers/what-is-the-gross-domestic-product-gdp/state/california/>

27 <sup>51</sup> *Gross Domestic Product: Oil and Gas Extraction (211) in California.* (2023). Stlouisfed.org.  
 28 <https://fred.stlouisfed.org/series/CAOILGASNGSP#>

1 **and gas industry estimated to be around 536,770.**<sup>52</sup> Collectively, total salaries and wages  
2 of California workers and employees directly affiliated with the oil and gas industry have  
3 generated over \$23 billion in personal income and over \$53 billion as related to indirect  
4 personal income associated with those employed in related industries and businesses.<sup>53</sup> In  
5 aggregate, the oil and gas industry has generated over \$47.9 billion in state and local and  
6 \$16.3 billion in federal tax revenues for 2022 (collectively \$64.2 billion).<sup>54</sup>

7 35. Specifically, in California, the oil and gas industry creates and sustains premium-  
8 paying jobs across a broad spectrum of job classes, including union, non-union, professional,  
9 and skilled workers. For example, petroleum system pump operators, refinery operators, and  
10 gaugers earn, on average, \$95,610, while gas and processing facility operators earn \$105,000  
11 annually.<sup>55</sup> In comparison, the typical wages for a construction worker in California average  
12 \$44,310 annually, according to the California Department of Tax and Fee Administration  
13 (CDTFA).<sup>56</sup>

14 36. As of December 2023, California holds around 3.1% of all U.S.-proven reserves,  
15 ranks fifth largest oil reserves in the U.S., ranks 7th in oil production among 32 oil-producing  
16 states, and is home to the Monterey Shale Reserve.<sup>57</sup> Comparatively, California’s in-state oil  
17 production is dwarfed by Texas, North Dakota, New Mexico, and Alaska. For perspective,  
18 Texas produced almost 18 times the amount of oil than California in 2022.

19  
20 <sup>52</sup> *Statewide LAEDC 2025 factsheet-1.pdf* | Powered by Box. (2025). Box.com.  
21 <https://wspa.app.box.com/s/2v30dlvt0fbez09irhav001rw19tfh48>

22 <sup>53</sup> *Statewide LAEDC 2025 factsheet-1.pdf* | Powered by Box. (2025). Box.com.  
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24 <sup>54</sup> *Statewide LAEDC 2025 factsheet-1.pdf* | Powered by Box. (2025). Box.com.  
25 <https://wspa.app.box.com/s/2v30dlvt0fbez09irhav001rw19tfh48>

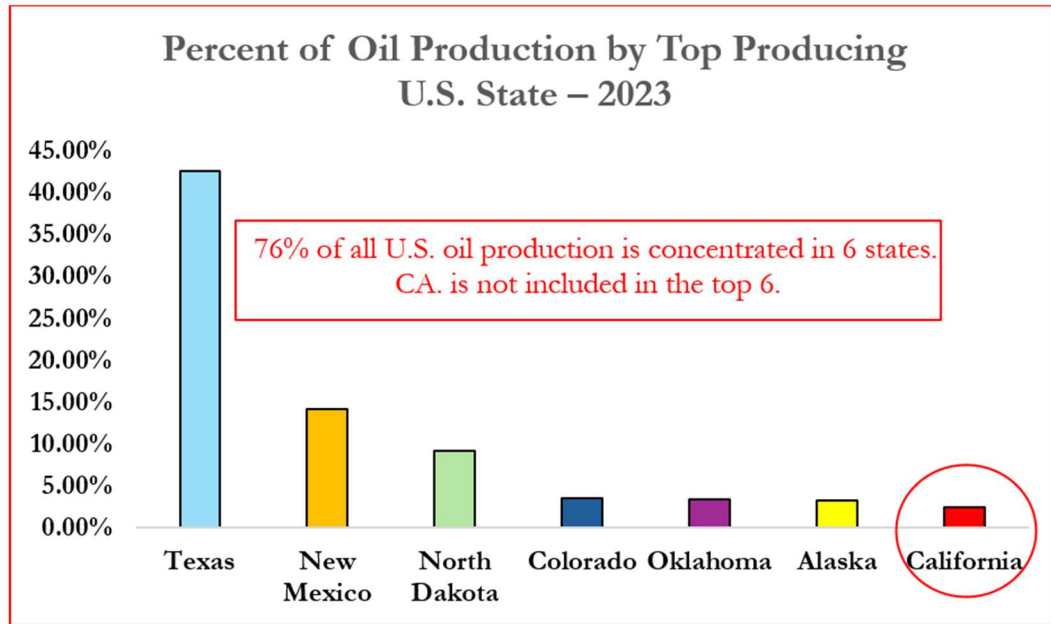
26 <sup>55</sup> *Oil & Gas In California – Los Angeles County Economic Development Corporation*. (2025, March  
27 16). Laedc.org. <https://laedc.org/research/reports/oil-gas-in-california/>

28 <sup>56</sup> *Fuel Taxes Statistics & Reports*. (n.d.). Wwww.cdtfa.ca.gov. <https://www.cdtfa.ca.gov/taxes-and-fees/spftrpts.htm>

<sup>57</sup> *California State Energy Profile. California Profile*. (n.d.).  
<https://www.eia.gov/state/print.php?sid=CA#89>

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Figure 8



(Source: Top 11 Oil-Producing States in 2023, ROBERT RAPIER, as cited in <https://oilandgaspress.com/top-11-u-s-oil-producing-states/>. See also, <https://www.investopedia.com/financial-edge/0511/top-6-oil-producing-states.aspx#citation-21>)

### iii. Production

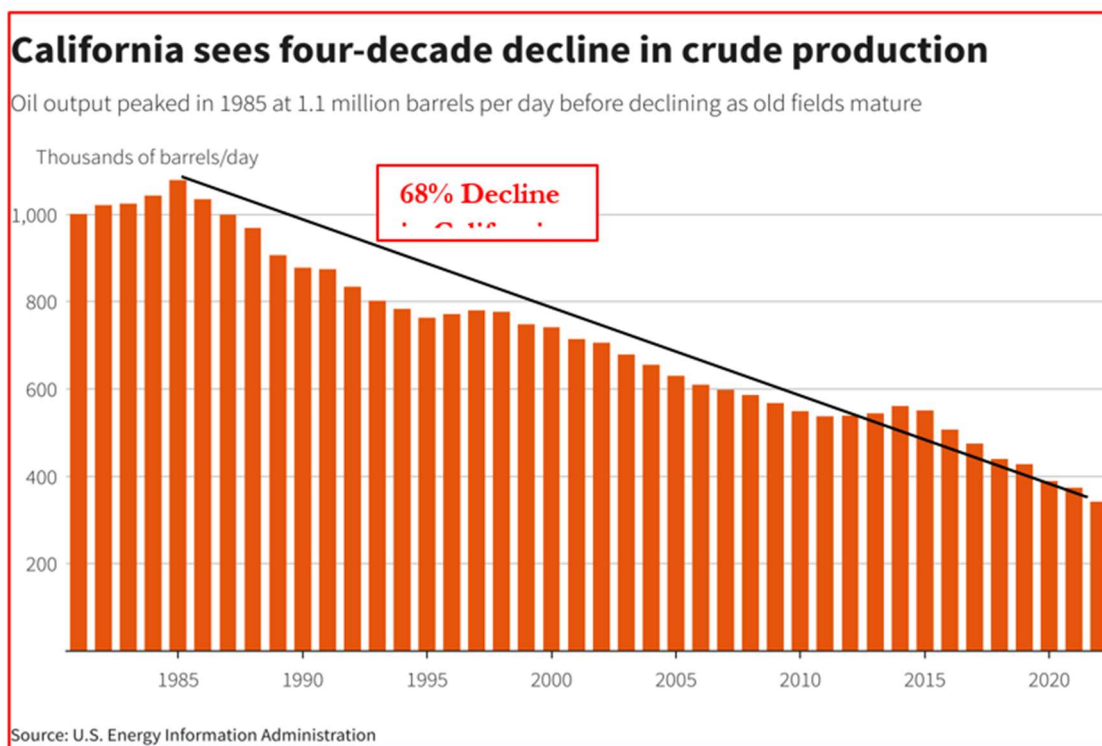
37. Once a global leader and ranking fourth in the world in oil production, today, California accounts for only around 2.5% to 2.7% of all U.S. crude production and is producing only 23.7% of its own in-state needs. California's oil production has consistently fallen since 1992. In 1992, California produced 320,888,000 barrels of oil.<sup>58</sup> In contrast, in 2022, California produced 124,727,000 million barrels of oil or only 39% of 1992 production. On a comparative basis for the 1990 to 2022 period, California's oil field production declined while overall U.S. oil field production grew. In 2012, the Golden State's in-state oil production was 197 million barrels a day, and California's population was 37.5 million. However, by 2022/23, with California's population at 38.95 million, in-state oil production

<sup>58</sup> California Energy Commission. (n.d.-a). *Annual oil supply sources to California refineries*. <https://www.energy.ca.gov/data-reports/energy-almanac/californias-petroleum-market/annual-oil-supply-sources-california>

1 had fallen by 35% to 127 million barrels. Meanwhile, California imports of non-U.S. foreign  
2 oil grew by 1,102% from its historic low in 1991 of 31 million barrels to 369 million barrels its  
3 peak high in 2018.<sup>59</sup>

4 38. Since 1990, while overall U.S. field production has increased 66%, California's  
5 field production declined 61%, and 68% decline from its peak production in 1985. From 2018,  
6 California's field production has declined 26.4%. Since 1982, California's ability to meet its  
7 demand for petroleum through in-state production has fallen from over 68% internally  
8 sourced to about 21% in 2023.

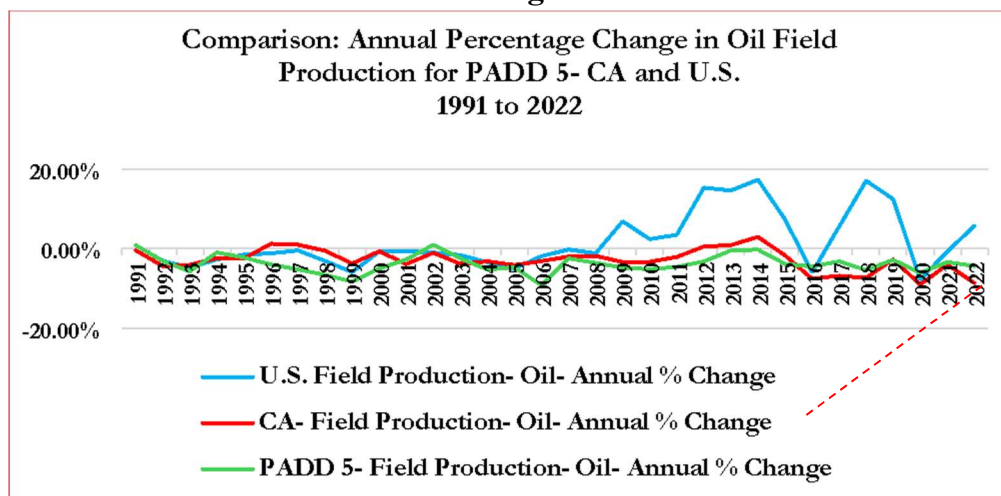
10 **Figure 9**



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28 <sup>59</sup> Based on CEC data.

1 39. California’s oil fields, production, and refineries are assigned to PADD Region  
 2 5.<sup>60</sup> The Petroleum Administration Defense Districts, or “PADDs,” were established during  
 3 World War II as a means of managing and allocating petroleum resources and production to  
 4 the war effort. The structure worked so well that it has been retained for reporting purposes  
 5 today. The PADD 5 region includes Alaska, Arizona, California, Hawaii, Oregon, and  
 6 Washington. On an annual percentage change basis, for the 1991 to 2022 period, while U.S.  
 7 oil field production increased and overall PADD 5 production moderated, California  
 8 production fell.

9  
 10 **Figure 10**

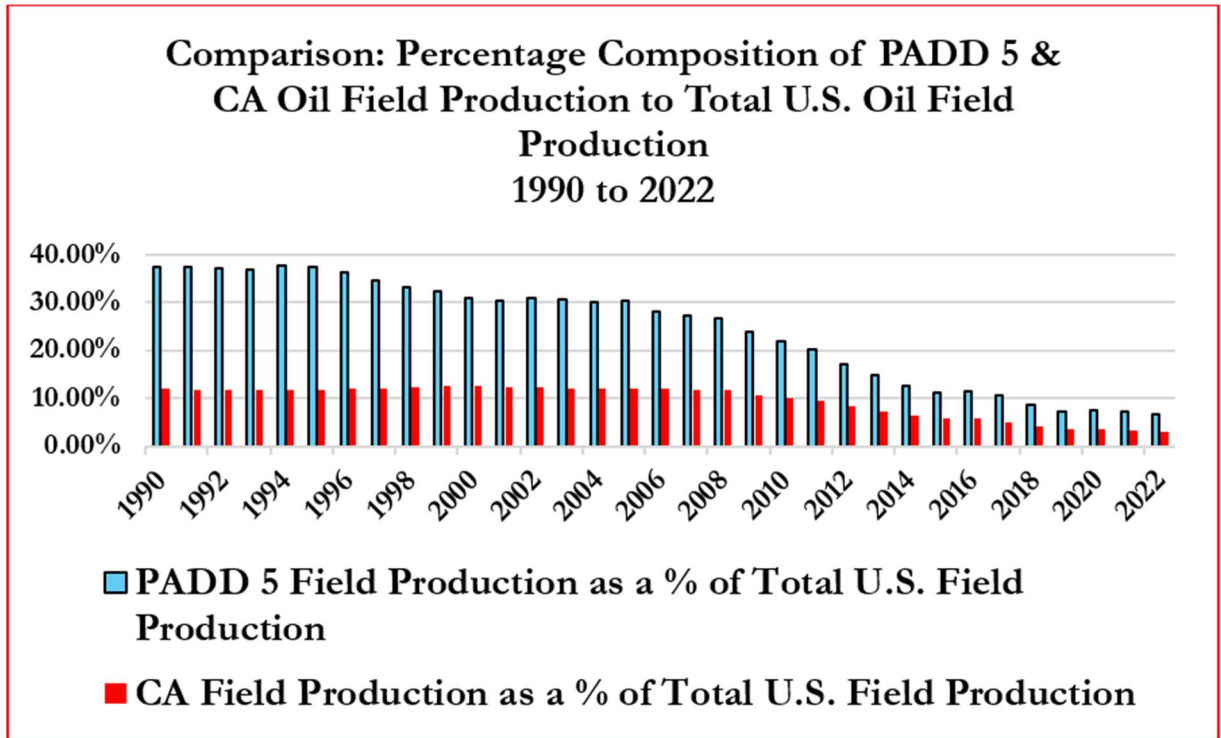


19 40. Notwithstanding the increase in California’s population, GDP, and motor vehicle  
 20 registrations, for the 1990 to 2022 period, PADD 5 and **California oil field production as a**  
 21 **percentage of total U.S. production has declined due to decreased in-state field**  
 22 **production.**

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 27 <sup>60</sup> Petroleum Administration Defense District. The PADDs were created in 1942 by Presidential  
 28 Executive Order during WW-II as a method for managing petroleum resources. It is currently used to  
 collect data and for data analysis.

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**Figure 11**



(Source: EIA)

41. California refineries use oil to produce a slightly different product mix and yields on a barrel-to-barrel basis compared to a “typical” barrel of oil products. Below is a chart comparing the “typical” barrel product or “slate” mix of California petroleum products to typical U.S. refineries for California in 2024.

Figure 12<sup>61</sup>

Comparison of Product Types Per Barrel-CA. to U.S.		
Product Type	Typical U.S. Product Types	California Product Types
CA. CARB Gasoline	0.00%	42.40%
Aviation (Jet) Fuel	9.00%	15.30%
CA CARB Diesel Fuel	25.00%	10.00%
Conventional Gasoline	45.00%	5.20%
EPA Diesel Fuel	0.00%	5.80%
Other RBOB	0.00%	2.40%
Other Diesel	0.00%	0.20%
<b>Total All Fuels</b>	<b>79.00%</b>	<b>81.30%</b>
All Other Products	21%	18.70%
<b>Grand Total:</b>	<b>100.00%</b>	<b>100.00%</b>

(Source: CDTFA\_CEC joint report 2024 review of the gasoline in ... (n.d.-b)

42. Significantly, the addition of Sable oil production from its three offshore platforms and the use of its existing Las Flores Pipeline System will change the supply dynamics in the State by creating not only more viable and more cost effective alternatives to non-U.S. foreign oil supplies, but will also work to help stabilize consumer gasoline prices by reducing the uncertainties and insecurities related to the crude oil supplies necessary to support California’s refineries in their production of combustible fuels such as gasoline, diesel and aviation, as well as asphalt and distillates used in the manufacturing of mobile phones, medical devices, and other essential products.

**iv. Movement & Transportation**

43. Petroleum products, such as oil and gasoline, are moved from point to point using various transportation methods, including marine vessels, barges, pipelines, rail tankers, and truck tankers. The movement of gasoline and oil is supported by storage tanks for short-term product storage.

<sup>61</sup> CDTFA\_CEC joint report 2024 review of the gasoline in ... (n.d.-b). [https://seuc.senate.ca.gov/sites/seuc.senate.ca.gov/files/cdtfa\\_cec\\_joint\\_report\\_2024\\_review\\_of\\_the\\_gasoline\\_in\\_california\\_and\\_relate.pdf](https://seuc.senate.ca.gov/sites/seuc.senate.ca.gov/files/cdtfa_cec_joint_report_2024_review_of_the_gasoline_in_california_and_relate.pdf)

1           44.     **California has no inbound pipelines** for petroleum or gasoline. However, the  
2 State has an extensive in-state (intrastate) network of pipelines for moving oil and gasoline  
3 from ports to refineries to distribution points (racks), as well as end-users such as airports.  
4 **California pipelines carry fuels to 60 distribution points within the state.** Proprietary  
5 pipelines are owned and operated by companies such as Crimson and PBF Logistics and were  
6 owned by Chevron and ExxonMobil. The sole private common carrier in California is Kinder  
7 Morgan.<sup>62</sup> Kinder Morgan owns, has an interest in, and operates over 79,000 miles of  
8 pipelines and 139 terminals throughout the U.S.<sup>63</sup> For perspective, according to the U.S.  
9 Department of Transportation, the U.S. has over 2.6 million miles of installed petroleum and  
10 petroleum-related pipelines.<sup>64</sup>

11           45.     **California has two major outbound pipelines** to supply gasoline to Nevada  
12 and Arizona. California’s pipeline network is composed of common carrier arteries that  
13 transport products from multiple producers and proprietary pipelines.

14           46.     According to the **U.S. Department of Transportation, pipelines are the safest**  
15 **method to transport petroleum products.**<sup>65</sup> A modern pipeline integrates advanced safety  
16 technologies with continuous operations to constantly monitor safety and environmental  
17 impacts. In the U.S., pipelines and pipeline operations are highly regulated and fall under the  
18 purview of various federal, state, and local agencies, including the Pipeline and Hazardous  
19 Materials Safety Administration. In California, the California Department of Conservation’s  
20 Geologic Energy Management Division (CalGEM) and the California Office of the State Fire  
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22  
23  
24 <sup>62</sup> Schremp, G. (2016). *PADD 5 & California Transportation Fuel Overview Western Regional*  
25 *Emergency Fuel Coordination Meeting California Energy Commission Sacramento, CA.*  
<https://www.naseo.org/Data/Sites/1/schremp-1.pdf>

26 <sup>63</sup> *Home - Kinder Morgan.* (n.d.). [Www.kindermorgan.com](http://www.kindermorgan.com). <https://www.kindermorgan.com>

27 <sup>64</sup> *General Pipeline FAQs.* (n.d.). PHMSA. <https://www.phmsa.dot.gov/faqs/general-pipeline-faqs>

28 <sup>65</sup> *General Pipeline FAQs.* (n.d.). PHMSA. <https://www.phmsa.dot.gov/faqs/general-pipeline-faqs>

1 Marshal (OSFM) oversee oil and gas pipelines.<sup>66</sup> **California has the strictest standards for**  
2 **oil and gasoline pipeline construction, testing, and maintenance in the world.**

3 47. Since California has no inbound pipelines and its in-state production has fallen  
4 considerably, nearly 100% of California’s non-U.S. sourced imported oil is delivered to its  
5 refineries via maritime vessels, which are significant contributors to GHG emissions.<sup>67</sup> For  
6 2023, California received 61% of its crude oil stocks from foreign sources and 16% from  
7 Alaska. Oil imports from these sources are delivered to California using maritime oil tanker  
8 vessels (limited barge).<sup>68</sup> Tankers that move oil among and between U.S. ports must comply  
9 with the Jones Act.<sup>69</sup> Passed in 1920 as the Merchant Marine Act of 1920, the Jones Act, as  
10 amended in 2006, prohibits foreign-flagged vessels from carrying cargo, including petroleum  
11 products between U.S. maritime ports in the contiguous states. Under the Jones Act, cargo,  
12 including crude oil, must be transported on U.S. flagged ships, built in the U.S. and crewed  
13 U.S. crew members. As of 2024, there are only 55 to 58 U.S. tankers that are compliant with  
14 the Jones Act and the majority, if not all, are deployed between the Gulf Coast and East Coast  
15 markets. The lack of available Jones Act compliant tankers compromises California’s ability  
16 to move crude from other U.S. sources and strengthens the need for Sable production and the  
17 use of the Las Flores Pipeline System.  
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22 <sup>66</sup> California Department of Conservation. (n.d.). *Pipelines and facilities*.  
23 [https://www.conservation.ca.gov/calgem/for\\_operators/Pages/Facilities.aspx#:~:text=Generally%2C%20CalGEM%20regulates%20all%20pipelines,used%20for%20transportation%20to%20refineries.](https://www.conservation.ca.gov/calgem/for_operators/Pages/Facilities.aspx#:~:text=Generally%2C%20CalGEM%20regulates%20all%20pipelines,used%20for%20transportation%20to%20refineries.)

24 <sup>67</sup> California Energy Commission. (2022). *2022-07\_Petroleum\_Watch*. California Energy  
25 Commission. <https://www.energy.ca.gov/media/7138>

26 <sup>68</sup> Commission, C. E. (n.d.). *Foreign Sources of Crude Oil Imports to California 2020*. California  
27 Energy Commission. <https://www.energy.ca.gov/data-reports/energy-almanac/californias-petroleum-market/foreign-sources-crude-oil-imports>

28 <sup>69</sup> Section 27 of the Merchant Marine Act of 1920 (P.L. 66-261). See, also:  
<https://crsreports.congress.gov/product/pdf/R/R45725>

1 48. California has only a minimal amount (less than 1% in 2015) of inbound oil  
2 transported using rail tankers.<sup>70 71</sup> In 2024, California received no inbound crude from Canada  
3 via rail but did import 468,000 barrels from North Dakota by rail tanker.<sup>72</sup> In the U.S., a DOT-  
4 117 certified rail tanker can hold up to 286,000 gallons or 6,809 barrels of product and must  
5 be designated with NA1993 identification.<sup>73 74</sup> With respect to rail transport, one of the  
6 controlling factors is the capacity of the rail tracks and routes. Rail tracks are rated for speed  
7 and weight and, therefore, have restrictions. Similar restrictions are associated with tunnels,  
8 bridges, curves, incline grades, declines, and urban areas.

9 **49. California relies extensively on over-the-road tanker trucks for the local**  
10 **shipping** of finished gasoline products from refineries to distributors (racks) and onward for  
11 delivery to retail gasoline stations. In 2015, tanker trucks averaged approximately 4,980  
12 deliveries per day, representing 39.84 million gallons of gasoline.<sup>75</sup> In California, **94% of all**  
13 **trucks are fueled by either diesel (67%) or gasoline (25%).**<sup>76</sup>

14  
15 <sup>70</sup> Schremp, G. & California Energy Commission. (2016). California transportation fuel overview. In  
16 *Western Regional Emergency Fuel Coordination Meeting*.  
<https://www.naseo.org/Data/Sites/1/schremp-1.pdf>

17 <sup>71</sup> Commission, C. E. (n.d.). *Foreign Sources of Crude Oil Imports to California 2020*. California  
18 Energy Commission. <https://www.energy.ca.gov/data-reports/energy-almanac/californias-petroleum-market/foreign-sources-crude-oil-imports>

19 <sup>72</sup> California Energy Commission. (2024). *Crude Oil Imports By Rail*. California Energy Commission.  
20 <https://www.energy.ca.gov/data-reports/energy-almanac/californias-petroleum-market/annual-oil-supply-sources-california/crude>

21 <sup>73</sup> *More Rail Tank Cars Meet DOT-117 Safety Standards in 2022* | Bureau of Transportation Statistics.  
22 (2022). Bts.gov. <https://www.bts.gov/newsroom/more-rail-tank-cars-meet-dot-117-safety-standards-2022>

23 <sup>74</sup> *Economics of Rail versus Pipeline*. (n.d.-b). Welcome to Altex Energy. <https://www.altex-energy.com/economics-of-rail-versus-pipeline/#1501828266955-2913a69d-c276>

24 <sup>75</sup> Crockett, & Schremp, G. (2015). *California Transportation of Petroleum Second Northern*  
25 *California Refinery Safety Forum*. <https://calepa.ca.gov/wp-content/uploads/sites/6/2016/10/Refinery-Documents-2015yr-Petroleum.pdf>

26 <sup>76</sup> California. (n.d.). *Large Entity Fleet Reporting STATEWIDE AGGREGATED DATA*. Retrieved  
27 February 23, 2025, from [https://ww2.arb.ca.gov/sites/default/files/2022-02/Large\\_Entity\\_Reporting\\_Aggregated\\_Data\\_ADA.pdf](https://ww2.arb.ca.gov/sites/default/files/2022-02/Large_Entity_Reporting_Aggregated_Data_ADA.pdf)

1           50. Two factors combine to make oil and fuel production a critical concern in  
2 California. First, California is virtually completely dependent on foreign, non-U.S.-sourced  
3 oil to produce its fuels. Second, California has had restrictions and is losing refinery capacity  
4 to produce fuels. The combination of these two factors is potentially fatal to the State’s  
5 economic vitality, growth, and long-term security. Significantly, any disruption of this very  
6 tight and delicate balance of supply and demand could have debilitating consequences for the  
7 State.

8                           **v. California Consumption**

9           51. Gasoline, diesel, and aviation fuels are made from crude oil. California is the  
10 2nd largest consumer of petroleum and the largest consumer of aviation fuel in the U.S.<sup>77</sup> In  
11 2023, Californians consumed over 500 million barrels of oil (1.8 million per day), 13.119  
12 billion gallons of gasoline, 3.6 billion gallons of diesel fuel, and over 216 million gallons of  
13 aviation fuel, based on CEC and CDTFA revenue data.<sup>78 79 80</sup>

14           52. The largest consumer of crude oil in California is gasoline production. Diesel  
15 fuel consumption is the second largest and represents about 17% of all crude oil consumption  
16 in the Golden State.<sup>81</sup> Californians consume between **30 to 33 million gallons of gasoline a**  
17 **day and around 9.9 million gallons a day of diesel fuels.** According to the CEC, 97% of all  
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21 <sup>77</sup> U.S. EIA, Crude Oil Production, Annual, Thousand Barrels, 2023.

22 <sup>78</sup> California Department of Tax and Fee Administration. (n.d.-b). Fuel Taxes Division Statistics &  
Reports – 2010. <https://www.cdtfa.ca.gov/taxes-and-fees/spftrpts10.htm>

23 <sup>79</sup> California’s Refinery Capacity Stretched to the Limit | California Policy Center. (2025, April 11).  
24 California Policy Center |. <https://californiapolicycenter.org/californias-refinery-capacity-stretched-to-the-limit/>

25 <sup>80</sup> Fuel Taxes Statistics & Reports. (n.d.). Wwww.cdtfa.ca.gov. <https://www.cdtfa.ca.gov/taxes-and-fees/spftrpts.htm>

26 <sup>81</sup> Commission, C. E. (n.d.). *Diesel Fuel Data, Facts, and Statistics*. California Energy Commission.  
27 <https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/diesel-fuel-data-facts-and-statistics>  
28

1 gasoline in California is consumed by automobiles, SUVs, and light-duty trucks.<sup>82</sup> The CEC  
2 further notes that “Nearly all heavy-duty trucks, delivery vehicles, buses, trains, ships, boats  
3 and barges, farm, construction and heavy-duty military vehicles and equipment have diesel  
4 engines. **Diesel is the fuel of choice because it has 12 percent more energy per gallon** than  
5 gasoline and has fuel properties that prolong engine life, making it ideal for heavy-duty  
6 vehicle applications.”<sup>83</sup>

7  
8 53. In general, long-term oil and gasoline consumption demonstrate relative  
9 inelasticity to price. That is, price increases do not have a correspondingly equal impact on  
10 consumption as consumers and incomes adjust to higher prices over the long term. However,  
11 studies do indicate the presence of elasticity in the short-term, particularly in California.<sup>84</sup> The  
12 consequence of oil, gasoline, and diesel fuel price increases, as well as aviation fuels,  
13 generally results in a change in consumer behavior in other expenditure areas; that is,  
14 consumers may reduce spending on entertainment, for example, in order to compensate for  
15 higher energy costs.

16 54. **Oil and gasoline consumption in California has not declined significantly**  
17 **over a twenty-five-year period.** Despite nearly a 100% improvement in miles per gallon due  
18 to engine and drive train efficiencies since 1975, and irrespective of California’s considerable  
19 efforts to encourage and force (and 2035 mandate) the adoption of EVs and Zero Emissions  
20 Vehicles (ZEVs), California’s demand for oil and gasoline have moderated only slightly over  
21 the 2001 to 2024 period. Furthermore, 2025 EV and ZEV adoption rates are significantly  
22 lower than CARB estimates and, according to recent sales figures, have slowed

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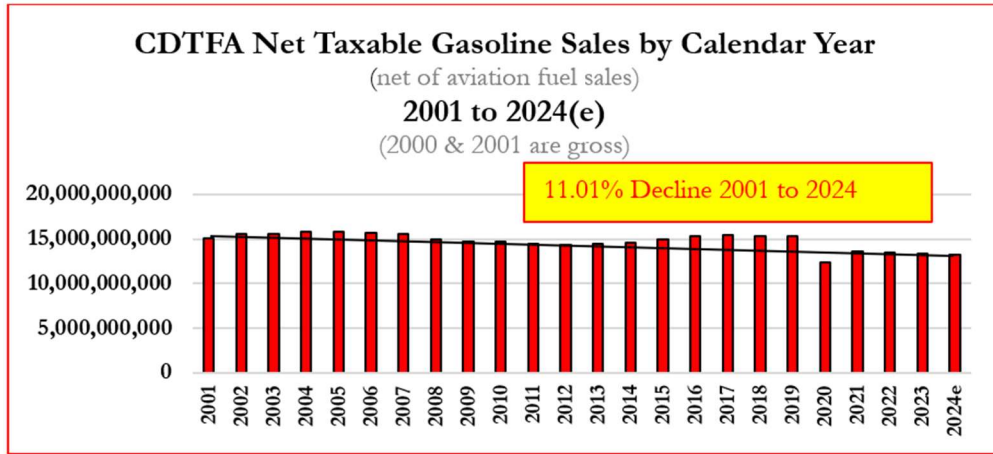
23 <sup>82</sup> Commission, C. E. (n.d.). *California Gasoline Data, Facts, and Statistics*. California Energy  
24 Commission. [https://www.energy.ca.gov/data-reports/energy-almanac/transportation-  
energy/california-gasoline-data-facts-and-statistics](https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-gasoline-data-facts-and-statistics)

25 <sup>83</sup> Commission, C. E. (n.d.). *Diesel Fuel Data, Facts, and Statistics*. California Energy Commission.  
26 [https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/diesel-fuel-data-facts-  
and-statistics](https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/diesel-fuel-data-facts-and-statistics)

27 <sup>84</sup> Colina, Armando R., et al. “Estimates of Gasoline Demand Elasticity Using California Refinery  
28 Outages.” SSRN Electronic Journal, 2023, <https://doi.org/10.2139/ssrn.4629611>.

1 considerably.<sup>85</sup> From 2001 to 2024, overall, CDTFA reported gasoline sales had fallen 11.12  
2 % or less than one-half of one percent per year.<sup>86</sup>

3  
4 **Figure 13**



13 (Source: <https://www.cdtfa.ca.gov/taxes-and-fees/spftrpts10.htm>)

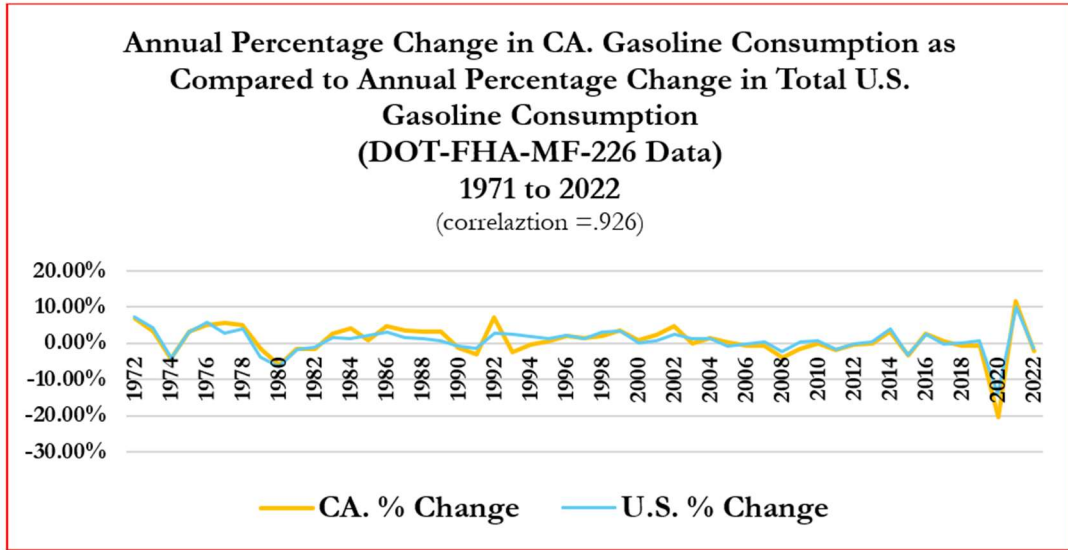
14 55. The annual percentage change in CDTFA gasoline sales is relatively consistent.  
15 It shows only a modest annual variance of -.46% and is highly correlated to the annual  
16 percentage change in overall U.S. gasoline consumption.

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26 <sup>85</sup> “New ZEV Sales in California.” *Www.energy.ca.gov*, [www.energy.ca.gov/data-reports/energy-almanac/zero-emission-vehicle-and-infrastructure-statistics-collection/new-zev](http://www.energy.ca.gov/data-reports/energy-almanac/zero-emission-vehicle-and-infrastructure-statistics-collection/new-zev).

27 <sup>86</sup> *Fuel Taxes Division Statistics & Reports – 2020*. (2020). Ca.gov. <https://www.cdtfa.ca.gov/taxes-and-fees/spftrpts20.htm>

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**Figure 14**



(Source: <https://www.fhwa.dot.gov/policyinformation/statistics/2022/mf226.cfm>)

56. Given California’s economic profile and growth rate, there is no indication that the demand for crude oil, gasoline, diesel fuels, and aviation fuels will decline significantly over the forthcoming ten-year period. Declines in fossil fuel usage are anticipated as alternative fuels are perfected and scaled, but various agencies and researchers expect the demand for oil to peak sometime between 2035 and 2055.<sup>87</sup> Notwithstanding the inevitable and future peak in fossil fuel production, crude oil is and will remain a vital component of any economy as it is used in so many other applications, such as asphalt and concrete.

**vi. California Imports**

57. California is the most dependent of all fifty states on foreign, non-U.S. oil as a source for refineries to produce gasoline, diesel, and aviation fuels. Since the 1980s, California's in-state oil production has fallen, and its reliance on foreign-sourced oil increased. By 2023, California’s in-state oil production was only able to supply around 23% of its needs, and its dependency on foreign-sourced oil grew by over 850%.

<sup>87</sup> Kimani, Alex. “IEA Predicts End to Oil & Gas Demand Growth before 2030.” *OilPrice.com*, 18 Oct. 2024, [oilprice.com/Energy/General/IEA-Predicts-End-to-Oil-Gas-Demand-Growth-Before-2030.html](https://oilprice.com/Energy/General/IEA-Predicts-End-to-Oil-Gas-Demand-Growth-Before-2030.html).

1           58. As California’s in-state oil field production declined, the Golden State turned to  
2 foreign petrostates to meet its in-state crude demands.<sup>88 89</sup> For 2023, **60.7% of California’s**  
3 **oil was imported from foreign sources, including the petrostates of Iraq (21.7%) and**  
4 **Saudi Arabia (15.7%).** South America’s Brazil and Ecuador represented the third and fourth  
5 largest sources of California import sources at 15.1% and 14.6%, respectively. Collectively,  
6 and based on CEC data, the three largest sources (Iraq, Saudi Arabia, and Brazil) represented  
7 52.4% of all California foreign imports.<sup>90</sup> Middle Eastern oil from OPEC members Saudi  
8 Arabia, Iraq, and the U.A.E., in aggregate, represented 39.25% of all California oil imports  
9 for 2023.

10           59. According to various independent estimates, **California ranks #1 in payments**  
11 **to foreign sources of oil** and pays more than \$61.8 million per day, or \$22.5 billion annually,  
12 based on Brent market prices, or \$54.41 million a day, or \$19.8 billion annually, based on  
13 WTI market prices, to foreign countries such as Iraq, U.A.E., and Saudi Arabia, and others  
14 for its oil imports.<sup>91</sup>

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18 <sup>88</sup> Fox News. (2015, December 21). *Shale oil deposit a possible boon to struggling California, but*  
19 *state wary, enviros opposed*. [https://www.foxnews.com/politics/shale-oil-deposit-a-possible-boon-to-](https://www.foxnews.com/politics/shale-oil-deposit-a-possible-boon-to-struggling-california-but-state-wary-enviros-opposed)  
20 [struggling-california-but-state-wary-enviros-opposed](https://www.foxnews.com/politics/shale-oil-deposit-a-possible-boon-to-struggling-california-but-state-wary-enviros-opposed)

21 <sup>89</sup> Jones, J. (2024, March). *States With the Most Oil Reserves [2024] - Construction Coverage*.  
22 *Construction Coverage*. <https://constructioncoverage.com/research/states-with-the-most-oil-reserves>

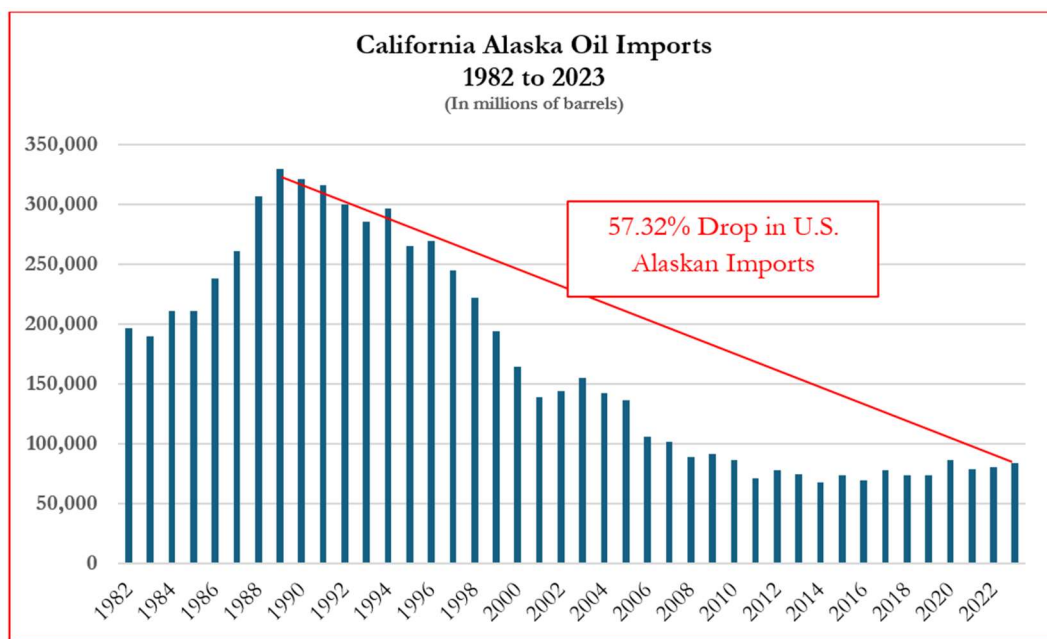
23 <sup>90</sup> California Energy Commission. (n.d.-h). *Foreign sources of crude oil imports to California*.  
24 [https://www.energy.ca.gov/data-reports/energy-almanac/californias-petroleum-market/foreign-](https://www.energy.ca.gov/data-reports/energy-almanac/californias-petroleum-market/foreign-sources-crude-oil-imports)  
25 [sources-crude-oil-imports](https://www.energy.ca.gov/data-reports/energy-almanac/californias-petroleum-market/foreign-sources-crude-oil-imports)

26 <sup>91</sup> Based on WTI and Brent crude prices as of 3/14/25, and CA. imports are reported by CEC. See also,  
27 Ed, C. (2018, October 9). *California ranks #1 in sending dollars abroad for Energy*.  
28 <https://www.cfact.org/2018/10/09/california-ranks-1-in-sending-dollars-abroad-for-energy/> . See  
also, *FACTS - Californians for energy independence*. (2023, July 31). Californians for Energy  
Independence.

[https://www.energyindependenceca.com/facts/#:~:text=California%20now%20imports%2075%25%20of,use%2C%20mostly%20from%20foreign%20countries.&text=California%20spends%20\\$25%20Billion%20dollars,to%20meet%20our%20energy%20needs](https://www.energyindependenceca.com/facts/#:~:text=California%20now%20imports%2075%25%20of,use%2C%20mostly%20from%20foreign%20countries.&text=California%20spends%20$25%20Billion%20dollars,to%20meet%20our%20energy%20needs).

60. In 1982, California produced 61% of its oil needs in the State.<sup>92</sup> Commencing in the mid-1990s, as California’s imports of domestically produced oil from Alaska and in-state oil production began a long-term decline, its need for foreign-produced oil began to accelerate. While imports of non-U.S. domestically sourced oil from OPEC and other states increased by 850%, California imports of U.S. domestically produced oil from Alaska plummeted by 57.32%.<sup>93</sup>

**Figure 15**

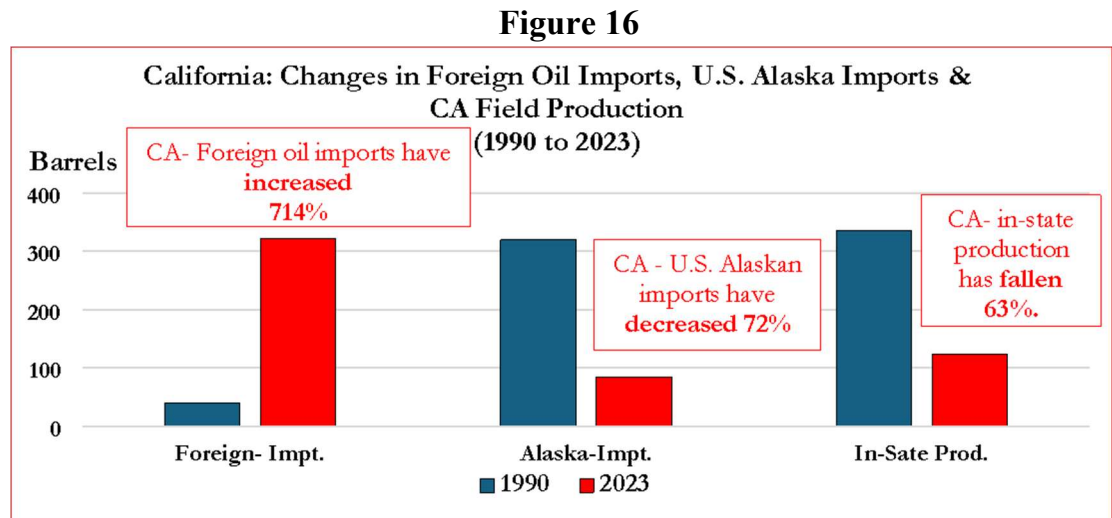


(Source: <https://www.energy.ca.gov/data-reports/energy-almanac/californias-petroleum-market/annual-oil-supply-sources-california>)

<sup>92</sup> California Energy Commission. (n.d.-a). *Annual oil supply sources to California refineries*. <https://www.energy.ca.gov/data-reports/energy-almanac/californias-petroleum-market/annual-oil-supply-sources-california>

<sup>93</sup> Alaska North Slope oil field production declined but accounted for 15% of California’s oil in 2021. Today, the Alaskan Pipeline operates at 20-25% of its original capacity due to lower field production. However, both field production and pipeline capacity utilization are expected to increase in 2025. See, <https://www.californiaenergyatlas.com/crude-oil>

1            61. While imports from foreign sources increased, domestically sourced ‘imports’  
2 from other U.S. petroleum-producing states, Alaska and California's in-state production have  
3 declined.

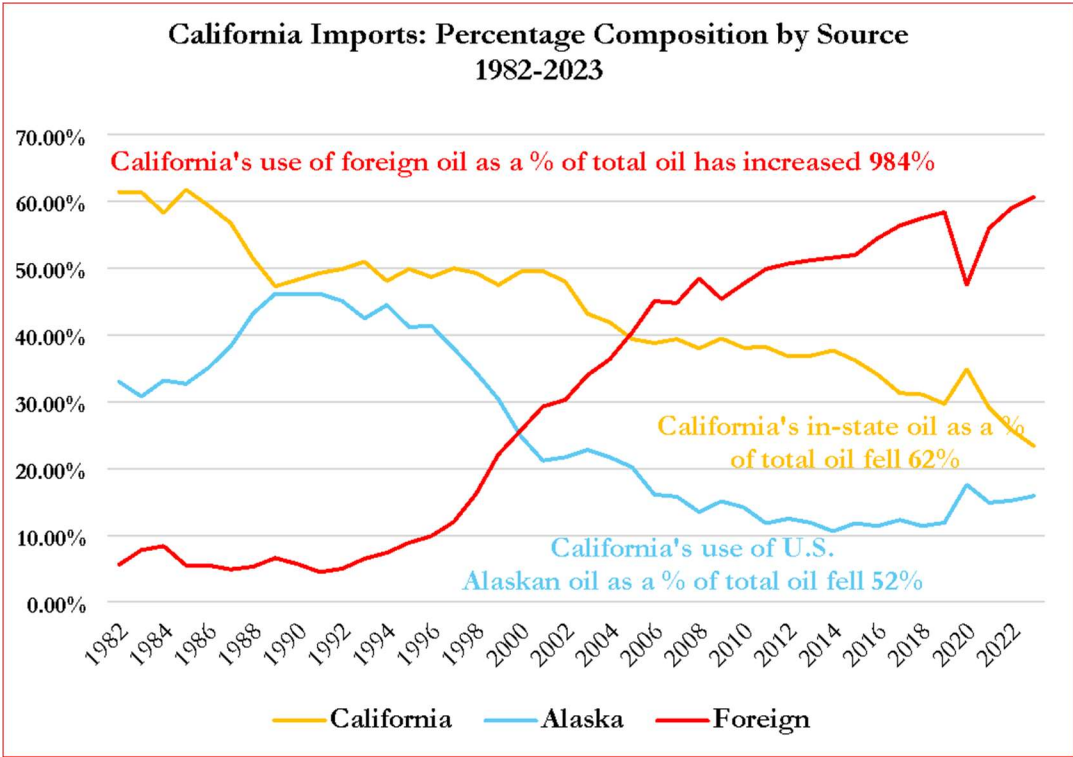


(Source: CEC)

14            62. While imports of non-U.S. domestically sourced oil from OPEC and other states  
15 increased by 857%, California imports of U.S. domestically produced oil, predominantly  
16 supplied from Alaska, plummeted by 57.32%.<sup>94</sup>

26 <sup>94</sup> Alaska North Slope oil field production declined but accounted for 15% of California’s oil in 2021.  
27 Today, the Alaskan Pipeline operates at 20-25% of its original capacity due to lower field production.  
28 However, both field production and pipeline capacity utilization are expected to increase in 2025. See,  
<https://www.californiaenergyatlas.com/crude-oil>

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**Figure 17**

(Source, CEC, EIA, and Author)

63. Compared to all U.S. oil imports, for 2024, California has a significantly greater dependency on and a higher percentage of non-U.S. foreign oil from petrostates such as Iraq, as well as high dependency on South America’s Brazil and Ecuador than the overall U.S. Since 1982, California’s reliance on foreign oil imports has increased by 857%, or 20 times greater than that of the overall U.S.’ importing of foreign oil.<sup>95</sup>

64. **No state in the U.S. imports more foreign-sourced oil for its use than California.** In 2023, California imported 321.153 million barrels of oil from non-U.S. sources. Since 1982, California's imports of foreign oil have increased by 857%. In 2024, California imports increased slightly to 321.831 million barrels of oil, or .21%. In 2024, as

<sup>95</sup> Alternative Fuels Data Center: Maps and Data - U.S. Production, Consumption, and Trade of Petroleum Products. (n.d.). Afdc.energy.gov. <https://afdc.energy.gov/data/10324>

1 U.S. imports of foreign oil hit a thirty-year low, California imports of crude came within 13%  
2 of its thirty-year high (2018).<sup>96</sup>

3 65. In 2024, California’s mix of non-U.S. foreign imports changed due to the  
4 emergence of Guyana filed production. Iraq, which provided 68,406 barrels of oil, composed  
5 21.26% of its non-U.S. oil imports. Brazilian oil imports increased to 20.41%, and as  
6 production scaled in Guyana, imports from that South American country increased exports to  
7 California to 50,840 barrels or 15.80% of the total 321,831 barrels of non-U.S. imported oil.<sup>97</sup>  
8 Additionally, throughout its history, California has also imported oil from Russia, Angola,  
9 Oman, and other national providers.<sup>98</sup>

10 66. California’s oil dependency on imports from various petrostates, such as Iraq  
11 and Saudi Arabia, as well as various other Middle Eastern sources, have both intended and  
12 unintended economic consequences and directly and indirectly support the sourcing  
13 countries’ economies, governing policies and structures, political agendas, and societal  
14 initiatives. Summarized in the Figure below are some pertinent social, political, and human  
15 freedom rankings for various sources such as Transparency International and Global Finance  
16 of California crude oil imports.<sup>99</sup> Iraq, which is California’s largest provider of foreign in  
17

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18 <sup>96</sup> Roberts, K. (2024, August 19). *2024 U.S. oil imports from Middle East hit new record low*. Forbes.  
19 <https://www.forbes.com/sites/kenroberts/2024/08/16/2024-us-oil-imports-from-middle-east-hit-new-record-low/>. See also, EIA and CEC import data.

20 <sup>97</sup> California Energy Commission. (n.d.-d). *Foreign sources of crude oil imports to California*.  
21 <https://www.energy.ca.gov/data-reports/energy-almanac/californias-petroleum-market/foreign-sources-crude-oil-imports>

22 <sup>98</sup> *California 2019 crude average carbon intensity up*. (2019). Green Car Congress.  
23 <https://www.greencarcongress.com/2020/06/20200616-carbci.html>

24 <sup>99</sup> Sources include Transparency International. (2024, September 12). *2023 Corruption Perceptions*  
25 *Index: Explore the results*. Transparency.org. <https://www.transparency.org/en/cpi/2023>; Vásquez, I.,  
26 McMahon, F., Murphy, R., & Schneider, G. (2023). *HUMAN FREEDOM INDEX 2023 A Global*  
27 *Measurement of Personal, Civil, and Economic Freedom*. <https://www.cato.org/sites/cato.org/files/2023-12/human-freedom-index-2023-full-revised.pdf>; *Age*  
28 *of conflict*. (n.d.). <https://pages.eiu.com/rs/753-RIQ-438/images/Democracy-Index-2023-Final-report.pdf?version=0>; Ventura, L. (2024, October 20). *Poorest Countries in the world 2024*. Global Finance Magazine. <https://gfmag.com/data/economic-data/poorest-country-in-the-world/>; *Human*

2023, is ranked 27<sup>th</sup> out of 179 as a “Fragile/Failed State Index” by the Fund for Peace. For perspective, North Korea and Rwanda rank “better.” The U.S. is ranked 141<sup>st</sup>.<sup>100</sup>

**Figure 18**

Comparison: Selected Rankings for Social, Economic & Corruption for California Oil Imports (2023/2024)					
	Iraq	Saudia Arabia	Brazil	Ecuador	United States
Percent of California Total Imports	21.70%	15.70%	15.10%	14.60%	NA
Corruption Perception Ranking	154	53	104	115	24
Human Freedom Ranking	156	157	70	72	17
Media/Press Freedom Ranking	169	166	82	110	55
Democracy Ranking	128	150	51	85	29
Economic Freedom Ranking/Score	Not Ranked	61.9	53.2	55	70.1
Poorest County Ranking	71	173	107	79	182
Government Integrity	18.3	43.9	36.9	34.9	76.4

**Figure 19**

FRAGILE STATES INDEX RANKING Selected CA Sources of Foreign Imports	
California Oil Source	Overall Ranking Out of 179
Iraq	27
Brazil	71
Ecuador	87
Saudi Arabia	100
U.S.A.	141

Note: Lower number = more unfavorable.

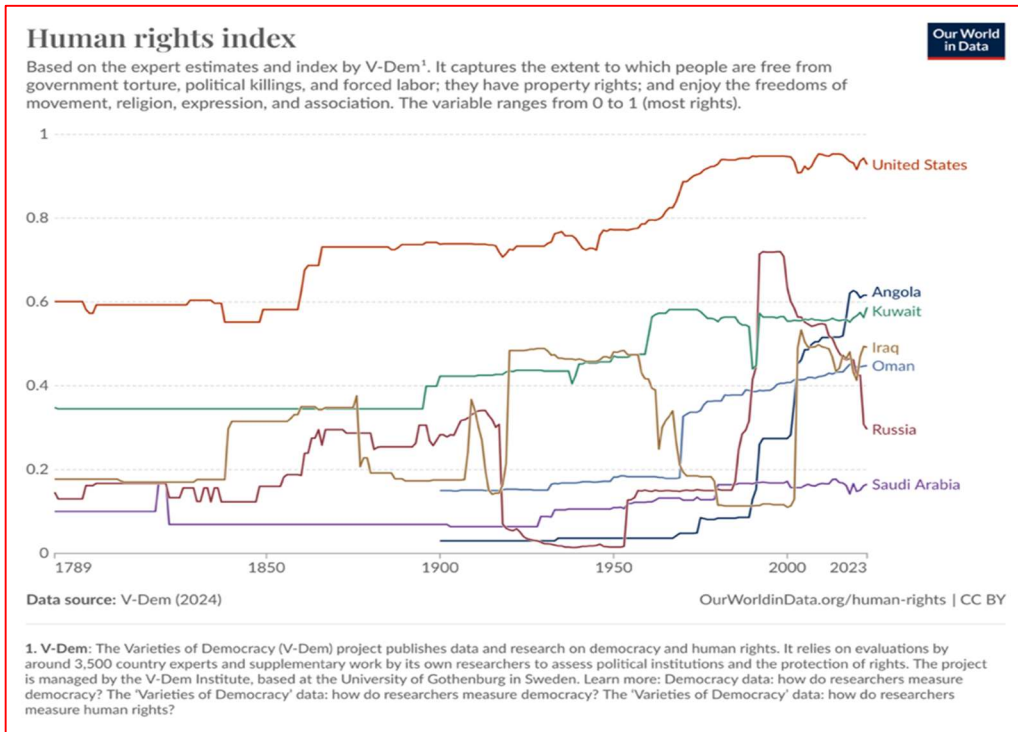
(Source: <https://fragilestatesindex.org/excel/>)

67. California's sources of foreign oil rank considerably lower in terms of human rights compared to domestically available sources from the U.S., including California.

*rights index.* (2024, March 7). Our World in Data. <https://ourworldindata.org/grapher/human-rights-index-vdem?tab=chart&country=BRA~ECU~IRQ~SAU~USA>; and The Heritage Foundation. (n.d.). *Index of Economic Freedom: All Country Scores | The Heritage Foundation.* Index of Economic Freedom | the Heritage Foundation. <https://www.heritage.org/index/pages/all-country-scores>.

<sup>100</sup> Energyskeptic. (n.d.). *Peak everything, overshoot, & collapse - preservation of knowledge.* Peak Everything, Overshoot, & Collapse - Preservation of Knowledge. <https://energyskeptic.com/>

Figure 20



## D. Crude Oil Pricing

### i. Commodity Pricing & Volatility

68. Crude oil is a commodity, and the price of crude oil is highly volatile and subject to dramatic swings and shifts, which, in turn, influence retail gasoline and aviation and diesel fuel prices. Crude oil prices swing wildly by the day, hour, and even the minute and, as such, are notoriously difficult to predict. Any major geopolitical event, weather disruption, labor situation, maritime tanker issues, etc., influence the price of oil.

69. As a global commodity, crude oil prices are set and traded on various international markets. Oil and gasoline pricing are very complex and subject to wide variations from day to day, even by the hour to hour, and in some instances, by the minute. The price of crude oil is primarily driven by the basic economic laws of supply and demand. When demand is strong and supply is low, the prices of oil, diesel, aviation fuels, and gasoline escalate.

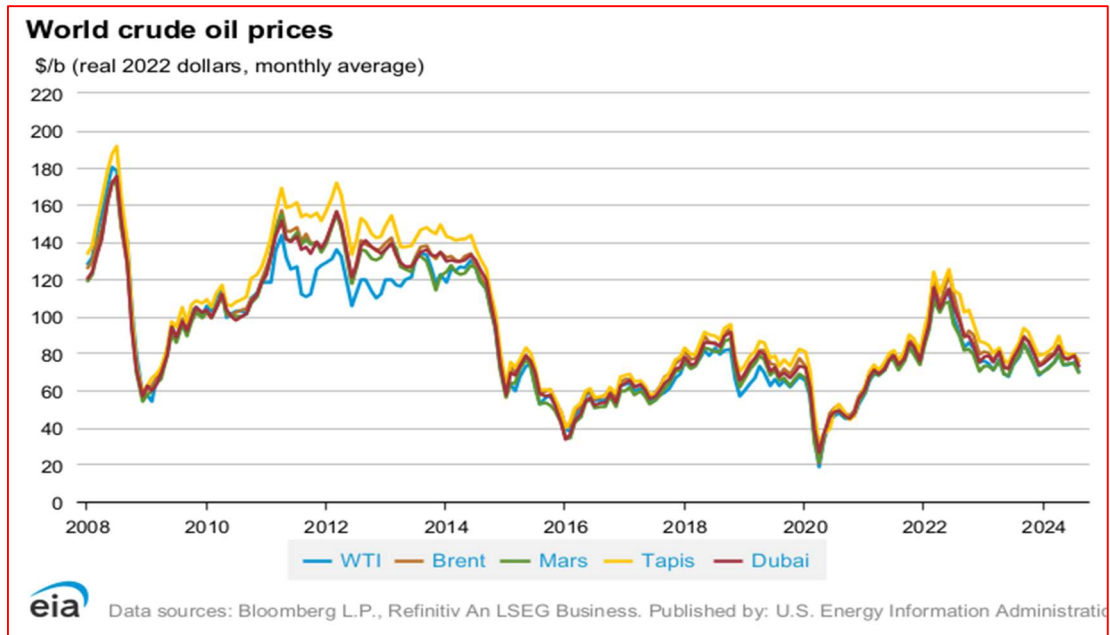
1           70. As petroleum is a global commodity, its **pricing is subject to extreme volatility**.  
2 Geopolitical, domestic, political, and regulatory actions conflate the basic market powers of  
3 supply and demand. Five factors influence the spot price of oil: **1-** supply (production), **2-**  
4 demand (consumption), **3-** geo-political events, **4-** national and local government policies and  
5 regulations, and **5-** trading/financial markets. Notably, any significant disturbance to any of  
6 these influencing factors will have an impact on the price of oil and, ultimately, the price of  
7 diesel and aviation fuels, as well as retail gasoline prices.

8           71. Oil is traded using long-term contracts and spot pricing in multiple markets, with  
9 the New York Mercantile (NYMEX) and Intercontinental Exchange (ICE) being  
10 predominant. Gasoline is also traded on global markets and in California on spot markets in  
11 San Francisco and Los Angeles. The trading prices of various oil types and grades are highly  
12 correlated and generally move in the same direction with similar degrees in magnitude of  
13 movement. Future oil prices are speculative and can fluctuate wildly. For example, on April  
14 20, 2020, the price of oil fell 306% from its May 2020 futures crude contract price to a  
15 negative price of \$37.63 a barrel on the New York Mercantile Exchange.<sup>101</sup> Technically, this  
16 type of inversion between current and future prices implies that the seller would have to pay  
17 the buyer to purchase the seller's oil contract. Under those circumstances, producers have  
18 little incentive to produce more products. Illustrated in the chart below are the various crude  
19 oil prices for various grades for the 2008 to 2024 period. As indicated, oil prices in various  
20 markets tend to move in correlation with one another.

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27 <sup>101</sup> Saefong, M. P. (2021, April 19). Oil prices went negative a year ago: Here's what traders have  
28 learned since. MarketWatch. <https://www.marketwatch.com/story/oil-prices-went-negative-a-year-ago-heres-what-traders-have-learned-since-11618863839>

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**Figure 21**

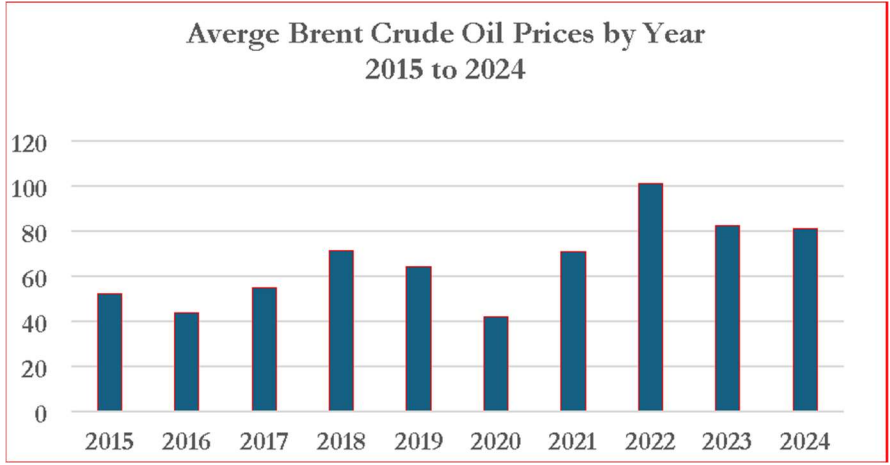


(Source: [https://www.eia.gov/finance/markets/crudeoil/spot\\_prices.php#:~:text=Crude%20oil%20is%20traded%20in,that%20are%20lower%20in%20quality](https://www.eia.gov/finance/markets/crudeoil/spot_prices.php#:~:text=Crude%20oil%20is%20traded%20in,that%20are%20lower%20in%20quality))

72. As indicated, the price of crude oil swings radically from period to period. For example, in the mid-2015 period, the WTI price of crude, which is typically a bit lower than Brent, was \$108 a barrel. Within about 7 months, the WTI price dropped 70% to \$32 a barrel. In 2019, the average price of Brent crude was \$64.30 a barrel. However, with the onset of COVID, the average price of Brent fell by almost 35% in 2020 and shot back up 141% in 2022.

**Figure 22**

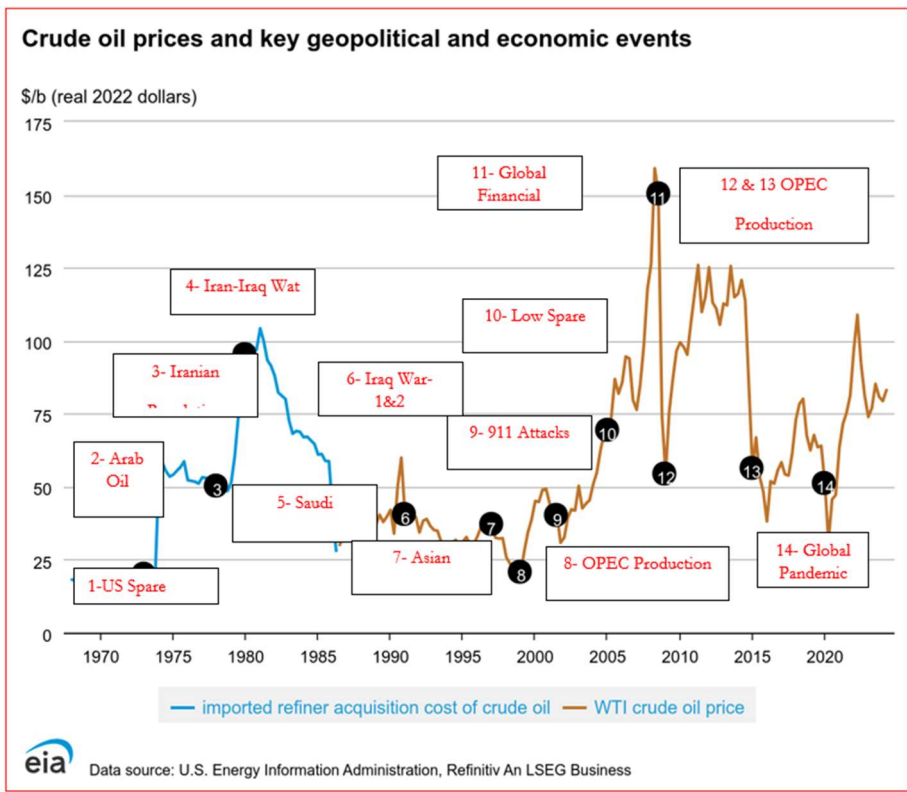
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(Sources: EIA, Macrotrends, Statista, OilPrice.com)

73. Illustrated below are oil price movements for the 1970 to 2023 period as related to major political, economic, and business events.

Figure 23



(Source: Author and

[https://www.eia.gov/finance/markets/crudeoil/spot\\_prices.php#:~:text=Crude%20oil%20is%20traded%20in,that%20are%20lower%20in%20quality](https://www.eia.gov/finance/markets/crudeoil/spot_prices.php#:~:text=Crude%20oil%20is%20traded%20in,that%20are%20lower%20in%20quality))

1           74.     During the 1970s, the U.S. experienced two **episodic** events or oil “shocks.” The  
2 first occurred in 1973, and the second was in 1978. On October 6, 1973, the Fourth Arab-  
3 Israeli war broke out between Israel and a collation of Arab nations, including Saudi Arabia,  
4 Egypt, and Syria.<sup>102 103</sup> The U.S., which had and continues to maintain formal defense  
5 alliances with Israel, supported Israel with a \$2.8 billion (equivalent to \$20.2 billion in 2024)  
6 defense aid package.

7           75.     In retaliation to the U.S. support of Israel, the Arab members of OPEC lowered  
8 oil production by 5% and initiated an oil embargo on the U.S. Overall, global oil supplies fell  
9 by 14%. Within days of the onset of hostilities, the reduction in production, and the embargo,  
10 petroleum prices surged by 71%, rising from \$3.01 to \$5.12 per barrel. The rapid and  
11 unexpected surge in prices dealt a severe, almost debilitating blow to the U.S. economy. Less  
12 than three months later, in December 1973, Arab member OPEC oil producers again cut  
13 production by 25% from its September levels. In reaction, the price to the U.S. for OPEC-  
14 sourced oil rocketed to \$11.65 a barrel — an increase of 287% in about 90 days. What  
15 followed were gasoline shortages, price spikes, and high inflation. By March 1974, the oil  
16 embargo was formally ended by the Arab nations, but its influence on the U.S. economy lasted  
17 well into the 1980s. Recognizing its vulnerability to foreign sources and spot market prices,  
18 the U.S. Congress established the Strategic Petroleum Reserve (SPR) in December 1975.<sup>104</sup>

19           76.     Due to its high dependency on non-U.S. foreign-sourced crude oil, California is  
20 extremely vulnerable to “oil shocks,” shortages, and price hikes that may be perpetrated by  
21 foreign actors. California has experienced supply shocks due to refinery closures, port  
22 disruptions, and global price surges linked to events thousands of miles away. Brent crude,  
23 which serves as the benchmark for many of these imports, tends to be more volatile than West  
24

25 \_\_\_\_\_  
26 <sup>102</sup> The Editors of Encyclopedia Britannica. (2018). Yom Kippur War | Summary, Causes, Combatants,  
& Facts. In *Encyclopedia Britannica*. <https://www.britannica.com/event/Yom-Kippur-War>

27 <sup>103</sup> Also known as the Yom Kippur War, or Ramadan War.

28 <sup>104</sup> 42 U.S. Code § 6231 and 42 U.S. Code § 6234

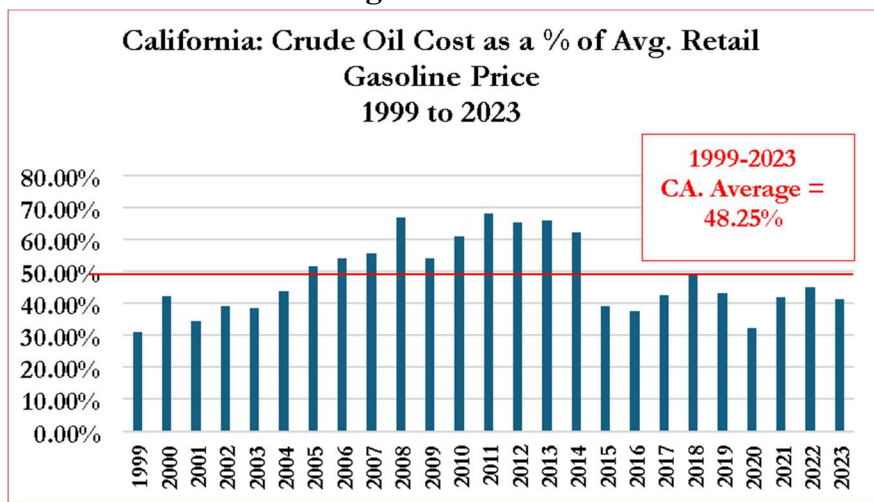
1 Texas Intermediate. When California's supply is driven by international markets, price spikes  
2 happen faster and last longer.<sup>105</sup>

3 **ii. California Crude Pricing**

4 77. In California, environmental factors such as earthquakes, fires, blizzards, heat,  
5 and flooding can cause disruptions in crude oil, gasoline, diesel, and aviation fuel production  
6 and distribution (transportation). Furthermore, refinery shutdowns, transitions, and  
7 decommissions adversely affect the supply of retail gasoline stocks, which rely on crude  
8 petroleum as a raw material (feedstock). When those events occur, the spot prices for crude  
9 oil stock can spike and are ultimately reflected in higher prices for retail gasoline and other  
10 fuels. The price of oil can also be further affected by events such as labor disputes and strikes  
11 involving rail and trucking, maritime terminal operational efficiencies, the supply of maritime  
12 tankers, employment rates, truck and rail transport, government lockdowns, such as COVID-  
13 19, and geopolitical events far from California.

14 78. The majority of raw material in the production of gasoline is crude oil, which in  
15 California has historically averaged 48.25%.

17 **Figure 24**



33 <sup>105</sup> Johnson, J. (2025, April 18). California could lose a large chunk of its refining capacity in a year. San Francisco Chronicle. <https://www.sfchronicle.com/california/article/refinery-closures-gas-prices-20279856.php>

1 79. On the West Coast, and particularly in California, refiners tend to pay slightly  
2 more for ‘first purchase’ crude oil than the rest of the U.S. due to low in-state production and  
3 the need to import oil from distant sources such as the Middle East.<sup>106 107</sup>

4 **E. Sable Offshore Corp.**

5 **i. Sable Oil Reserves, Capacity and Platforms (wells)**

6 80. According to the company’s latest reserve assessments, the total net estimated  
7 contingent resources across all platforms amount to 646 million barrels of oil equivalent  
8 (MMBoe). This includes a low estimate of 179 MMBoe and a best estimate of 467 MMBoe,  
9 with the resource base comprising 86% oil, 13% gas, and 1% natural gas liquids (NGLs).<sup>108</sup>  
10 These figures underscore the long-term strategic value of the asset base, not only in terms of  
11 short-term output but also in terms of **reserve longevity**, development flexibility, and  
12 potential for **scalable economic impact**. With a phased restart strategy already underway and  
13 robust reserve validation, Sable’s offshore system is positioned for both operational reliability  
14 and multi-decade resource contribution to California’s economic future.

15  
16 **Figure 25**

Sable Platform Capacity				
Platform	Existing Wells	Available well slots	Est. Net Production Per Day	Est. Restart Date
Harmony	32	23-27	15.0-19.0 MBOE	15-May-25
Heritage	44	15-17	19.0-23.0 MBOE	Jul-25
Hondo	26	10	6.0-8.0 MBOE	Aug-25

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20 81. Sable’s offshore oil recovery infrastructure comprises three key production  
21 platforms- Harmony, Heritage, and Hondo- all part of SYU (Santa Ynez Unit). These  
22 platforms are designed for high-volume, multi-well production and together **represent one**

23  
24 <sup>106</sup> California law and refinery closure reflect ongoing challenges for the state’s fuel market - U.S.  
25 Energy Information Administration (EIA). (n.d.).  
<https://www.eia.gov/todayinenergy/detail.php?id=63944>

26 <sup>107</sup> California Crude Oil First Purchase Price (Dollars per Barrel). Eia.gov.  
[https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?f=M&n=PET&s=F005006\\_\\_3&utm](https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?f=M&n=PET&s=F005006__3&utm)

27 <sup>108</sup> Sable Offshore Corp. - Events & Presentations. (2023). Sableoffshore.com.  
28 <https://sableoffshore.com/events-and-presentations/default.aspx>

1 **of the most robust offshore systems along the California coast.** As of the second half of  
2 2025 (2H25), Sable anticipates a total production capacity between 40,000 and 50,000 barrels  
3 of oil equivalent per day (BOE/D), with near-term output poised to rival the historical 2015  
4 peak of 45,000 BOE/D.<sup>109</sup>

5 82. Platform Harmony, which resumed production on May 15, 2025, includes 32  
6 existing wells and up to 27 available well slots, targeting a 2H25 production rate of 15,000 to  
7 19,000 BOE/D. Platform Heritage, scheduled to restart in July 2025, features 44 existing  
8 wells with 15–17 additional well slots and is expected to deliver 19,000 to 23,000 BOE/D.<sup>110</sup>  
9 Platform Hondo, with 26 existing wells and 10 available slots, is projected to come online in  
10 August 2025, contributing 6,000 to 8,000 BOE/D..

11 **ii. Sable Production Operational Analysis**

12 83. Operationally, Sable is currently configured to produce between 30,000 to  
13 35,000 barrels of crude oil daily. However, because of its multiple well capabilities, longer-  
14 term production yields could be considerably higher. In general, larger producers with 10,000  
15 barrels a day or more in crude oil production require a realized price of \$31.00 a barrel to  
16 cover fully loaded operating expenses for existing wells.<sup>111</sup> For perspective, the breakeven for  
17 a new drilled well ranges between \$61.00 to \$71.00 a barrel.

18 84. Based on Sable’s estimates and compared to those generated in my analysis as  
19 well as those associated with external benchmarks, Sable’s operating breakeven is favorable  
20 and competitive and falls within the range of other offshore shallow-water producers.  
21 Accordingly, there is an “economic” market for Sable’s production, which is cost-competitive  
22 on a comparable basis based on current and expected Brent prices.

23  
24 <sup>109</sup> *Sable Offshore Corp. - Events & Presentations.* (2023). Sableoffshore.com.  
25 <https://sableoffshore.com/events-and-presentations/default.aspx>

26 <sup>110</sup> *Sable Offshore Corp. - Events & Presentations.* (2023). Sableoffshore.com.  
27 <https://sableoffshore.com/events-and-presentations/default.aspx>

28 <sup>111</sup> “Oil and Gas Activity Edges Higher; Uncertainty Rising, Costs Increase.” *Dallasfed.org*, 2025,  
[www.dallasfed.org/research/surveys/des/2025/2501#tab-questions](http://www.dallasfed.org/research/surveys/des/2025/2501#tab-questions).

Figure 26

Estimated Sable Breakeven Costs as Compared to CA Sources		
Source	Estimated Breakeven Cost Range	Current CA Source of Oil
Middle East	\$9.00 to \$11.00	Yes
South America	\$7.00 to \$28.00	Yes
Offshore-Shallow	\$37.00 to \$47.00	
Offshore- Deep	\$43.00 to \$53.00	
Offshore-Shallow- Rystad	\$37.00	
Offshore- Deep- Rystad	\$43.00	
North American Shale- Rustad	\$45.00	
Oil Sands- Rystad	\$57.00 to \$75.00	Yes- Canada
<b>Sable Offshore- Estimated</b>	<b>\$29.00 to \$41.30</b>	
Note: Ranges vary based on production volumes and regulatory costs.		
Sources: Various and calculated.		

As noted by Rystad, costs for offshore shallow shelf, as well as deepwater producers, declined around 35%.<sup>112</sup> Given Sable’s technology, further cost reductions are possible.

iii. Sable Customers and Selling Markets

85. Oil and gas producers sell their output (production) predominantly to refineries, which, in turn, create products such as gasoline, diesel, and aviation fuels and distillates. As crude oil is a global commodity, there are a number of different markets that Sable could potentially sell its production on and to. In California, there are only three major in-state refinery customers representing a combined daily capacity of around 781,000 barrels a day remaining as customers for Sable oil production. All three of these in-state refineries are **heavily dependent on non-U.S. foreign oil** as feedstock to its fuel production process and are **essential to California’s economic growth and national security**.

Figure 27

Sable CA. Refinery Customers			
Refinery	Operator	Location	Approx. Capacity (bpd)
Chevron	El Segundo	Southern CA	269,000
PBF Energy	Torrance	Southern CA	149,000
Marathon Petroleum	Carson/Wilmington	Southern CA	363,000
<b>Total Capacity</b>			<b>781,000</b>

(Source: Statewide Economic Impacts of Resuming Production at the Santa Ynez Unit (SYU))

<sup>112</sup> *Shale project economics still reign supreme as cost of new oil production rises further.* (2024, October). Rystad Energy. <https://www.rystadenergy.com/news/upstream-breakeven-shale-oil-inflation>

1           86.     Significantly, any disruption to the crude oil feedstocks in these refineries or any  
2 unplanned interruptions to the operations of these refineries will have a detrimental impact  
3 on consumer prices. To maintain a viable operational profile, especially in consideration of  
4 increased regulatory costs and the profit restrictions imposed upon the refineries by ABX2-1,  
5 **the surviving California refineries would benefit from the security and cost advantages**  
6 **of additional in-state oil production.**<sup>113</sup>

7           87.     Sable’s oil production will most likely be sold to refineries under long-term  
8 contracts, with pricing indexed to the Brent spot market and adjusted for sulfur content,  
9 gravity, and California location differential (typically a \$2-\$5/bbl. discount). As is customary  
10 with production, while some portions of Sable’s production may be sold on the spot market,  
11 Sable is expected to prioritize volume stability and cash flow predictability through structured  
12 contracts long-term contracts (6–36 months) with California refineries to **help create price**  
13 **and volume certainty for both Sable and the California consumer.** Spot market sales,  
14 which are relatively common in the industry, would most likely cover incremental volumes  
15 or provide a hedge for price movement, especially during high and peak demand periods (e.g.,  
16 summer driving season). Importantly, the **marketability of Sable crude oil is high and**  
17 **lively. California currently imports over 75% of its oil needs, and the decline in local**  
18 **production creates a significant supply gap that Sable is well-positioned to fill with**  
19 **minimal transportation costs and overhead.**<sup>114</sup>

20                   **iv.     Sable’s Pipelines**

21           88.     Sable’s offshore crude oil production is expected to enter California’s intrastate  
22 pipeline and refining market, where it is particularly well-suited due to its medium-sour  
23

24 \_\_\_\_\_  
25 <sup>113</sup> “Governor Newsom Signs Legislation to Prevent Gas Price Spikes and Save Californians Money |  
26 Governor of California.” *Governor of California*, 14 Oct. 2024,  
27 [www.gov.ca.gov/2024/10/14/governor-newsom-signs-legislation-to-prevent-gas-price-spikes-and-](https://www.gov.ca.gov/2024/10/14/governor-newsom-signs-legislation-to-prevent-gas-price-spikes-and-save-californians-money/)  
28 [save-californians-money/](https://www.gov.ca.gov/2024/10/14/governor-newsom-signs-legislation-to-prevent-gas-price-spikes-and-save-californians-money/).

<sup>114</sup> EIA. (2025). *Short-Term Energy Outlook - U.S. Energy Information Administration (EIA)*. Eia.gov.  
<https://www.eia.gov/outlooks/steo/>

1 quality. Production from the Santa Ynez Unit (SYU) is processed and delivered via the Las  
 2 Flores Canyon (LFC) facility into **existing infrastructure serving major California**  
 3 **refineries** (consumers of Sable production). The consuming refineries are linked to offshore  
 4 Sable’s California production via the Sable-owned Las Flores Pipeline system and connected  
 5 third-party pipelines and are configured to process medium to heavy sour-grade crude like  
 6 that produced from SYU and consistent with other oil fields in Kern and San Luis Obispo  
 7 counties. Collectively, Sable’s pipelines have a design throughput capacity of 240,000 barrels  
 8 a day.

10 **Figure 28**

Sable Pipelines				
Pipeline	Known As	Design Capacity (bpd)	Estimated Utilization	Potential Daily Throughput
Line 324	Line 901	150,000	85% to 100%	127,500 to 150,000
Line 325	Line 903	300,000	85% to 100%	255,000 to 300,00

14 89. Lines CA-324 and CA-325 were historically used to transport Santa Ynez Unit  
 15 (SYU) crude from the onshore Las Flores Canyon Processing Facility to Pentland Station  
 16 south of Bakersfield and then to connected inland pipeline networks. Pending final clearance  
 17 under California and federal oversight, Sable intends to open the recommissioned lines to  
 18 deliver crude to the inland networks for eventual refining into fuels. If both lines are  
 19 recommissioned and operated near estimated utilization, combined throughput could support  
 20 ~200,000 bpd, which is more than sufficient for the combined peak output of the Hondo,  
 21 Harmony, and Heritage platforms.<sup>115</sup> **Assuming Sable produces 31,500 to 40,000 barrels**  
 22 **per day, Sable would comprise 10% to 15% of California’s daily in-state production for**  
 23 **2024.**

24 90. Line CA-324 (previously known as Line 901) and Line CA-325 (previously  
 25 known as Line 903), collectively known as the Las Flores Pipeline System, are critical  
 26 components of the oil transportation infrastructure associated with Sable’s offshore assets.

27 <sup>115</sup> *Sable Offshore Corp. - Events & Presentations.* (2023). Sableoffshore.com.  
 28 <https://sableoffshore.com/events-and-presentations/default.aspx>

1 These pipelines historically moved SYU crude from onshore Las Flores Canyon treatment  
2 facility to Pentland Station south of Bakersfield and then to connected inland California  
3 markets. Line 324 has a maximum permitted throughput capacity of 150,000 barrels per day  
4 (bpd), while Line 325 is permitted at 300,000 bpd. **The recommissioning of Sable Lines  
5 324 and 325 would reduce the need for marine tanker transport, reduce emissions risk,  
6 and help restore a critical energy corridor within the state’s coastal infrastructure  
7 network.**<sup>116</sup>

8 **v. Potential Economic Impact on State, Santa Barbara & Adjacent**  
9 **Counties**

10 91. Sable projects daily production of 45,000 BOE or 31,500 barrels of crude oil,  
11 with multiple scenarios modeled and developed extending to higher volumes to test potential  
12 economic impact. Assuming a stable Brent benchmark oil price of \$70 per barrel, the gross  
13 revenue impact of operations can be scaled accordingly over a full year (365 days) and  
14 estimated to be \$804,825,000.

15 92. The analysis assumes a conservative 8% net profit margin, which reflects the  
16 high capital and operating costs associated with offshore oil production. California levies an  
17 8.84% corporate income tax, which would apply to any taxable income generated in-state.  
18 Additionally, property taxes, estimated at \$5 million annually for the Las Flores Canyon  
19 facility and related infrastructure, along with employment taxes from a workforce of roughly  
20 340 full-time employees (averaging \$118,000 per year), provide further contributions to state  
21 and local revenue.

22  
23 **Figure 29**  
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25

26  
27 <sup>116</sup> *Plains All American Reports Fourth-Quarter and Full-Year 2023 Results; Announces 2024*  
28 *Guidance - Fri, 02/09/2024 - 08:00.* (2023). Plains All American Pipeline. <https://ir.plains.com/news-releases/news-release-details/plains-all-american-reports-fourth-quarter-and-full-year-2023>

Sable Production & Potential Contribution to CA State & Local Revenues								
Daily BOE Production	Employee Count	Est. Annual Gross Revenue	Est. Net Profit	Est. Sales Tax	Est. CA. Corporate Tax	Actual Property Tax	Est. Payroll Tax	Estimated Contribution to Total State Revenue
45000	340	\$1,314,000,000	\$105,120,000	\$4,763,250	\$9,292,608	\$5,000,000	\$2,407,200	\$21,463,058
100000	758	\$2,920,000,000	\$233,600,000	\$10,585,000	\$20,650,240	\$5,000,000	\$5,363,636	\$41,598,876
250000	1894	\$7,300,000,000	\$584,000,000	\$26,462,500	\$51,625,600	\$5,000,000	\$13,409,091	\$96,497,191
500000	3788	\$14,600,000,000	\$1,168,000,000	\$52,925,000	\$103,251,200	\$5,000,000	\$26,818,182	\$187,994,382
1000000	7576	\$29,200,000,000	\$2,336,000,000	\$105,850,000	\$206,502,400	\$5,000,000	\$53,636,364	\$370,988,764

Assumes \$80/BOE, 8% net margin, 7.25% sales tax on 5% taxable spend of revenue, 8.84% corporate tax, \$5.0 property tax, and 6% payroll tax on \$118K average salary for 550 FTEs)

(Source: author's calculation)

93. Offshore oil infrastructure, such as platforms, pipelines, and the onshore treatment facility, is subject to local property taxation, which directly contributes to county-level general funds. Sable's offshore platform operations, maintenance, and transportation via pipelines, the potential economic contributions to the local communities are substantial. The three offshore platforms are estimated to produce approximately 31,500 to 50,000 barrels per day- totaling around 11 million barrels annually of crude California oil. Assuming this level of output could potentially generate an estimated **\$21.5 to \$41.6 million per year in combined local and state revenues**, including sales tax, corporate tax, property tax, and payroll taxes. This includes contributions to Santa Barbara County for hosting the LFC treatment facility and onshore pipeline infrastructure, San Luis Obispo County for service logistics and marine jurisdiction, and Kern County through indirect participation in the regional energy supply chain.

94. Santa Barbara County, in particular, stands to benefit economically the most from Sable operations. Historically, oil-related revenues in the county have funded essential public services such as fire protection districts, law enforcement staffing, road maintenance, and local school districts. The return of Sable's offshore activity, coupled with the rehabilitation of pipelines and treatment facility assets, will likely help restore and expand Santa Barbara's revenue flows, enabling the county to address long-standing infrastructure gaps and growing public service needs.

95. In San Luis Obispo County, where marine service operators and support logistics for offshore operations are based, Sable's activities will contribute to business tax bases, vendor income, and contractor employment, particularly in port services, environmental

1 compliance, and vessel support. While Kern County may see more limited direct benefits due  
 2 to its inland location, increased activity at Pentland Station as the terminus of the Las Flores  
 3 Pipeline, supply chain links, such as heavy equipment vendors, staffing agencies, and  
 4 technical services, could nonetheless generate income and modest revenue benefits tied to  
 5 Sable’s restart.

6 96. The potential fiscal contributions associated with the recommissioning and  
 7 operations of Sable’s three platforms primarily benefit Santa Barbara County, which hosts  
 8 Sable’s offshore infrastructure and the LFC treatment facility; San Luis Obispo County,  
 9 through its proximity to offshore jurisdiction and logistical support activities; and to a lesser  
 10 extent, Kern County, which may participate indirectly through the supply chain and remote  
 11 platform, processing, and pipeline support services.<sup>117 118</sup>

12 **vi. Potential Economic Implications of Sable Production on**  
 13 **Employment and Personal Income**

14 97. The restart of offshore oil production by Sable will potentially deliver a  
 15 substantial and sustained employment and income boost to the Central Coast region of  
 16 California, particularly to Santa Barbara County. Sable projects a steady-state offshore  
 17 workforce of approximately 220 full-time California-based employees, supported by an  
 18 additional 120 steady-state contractors, collectively **totaling around 340 personnel.**

19 **Figure 30**

Estimated Impact of Sable Production on Employment, Wages & Earnings			
Job Type	Estimated Headcount	Avg. Salary	Total Payroll Impact
Sable Employees (CA-based)	~220	\$120K–\$150K/year	~\$30M–\$33M/year
Steady-State Contractors	~120	\$90K–\$110K/year (blended)	~\$10M–\$13M/year
<b>Total Annual Offshore Payroll</b>	<b>~340</b>		<b>~\$40M–\$46M/year</b>

20 (Source: Calculated)

21 <sup>117</sup> *Oil & Gas | CA State Lands Commission.* (n.d.). <https://www.slc.ca.gov/oil-gas/>

22 <sup>118</sup> *Cultivation Cap & Eligible Business License Applicants Lists | Santa Barbara County, CA - Official Website.* (2025). [Countyofsb.org. https://www.countyofsb.org/1175/Energy-Division](https://www.countyofsb.org/1175/Energy-Division)

1           98. As indicated, wages and salaries in the oil and gas industry are higher than  
2 overall national and California averages. Based on Sable’s production scale-up and estimates,  
3 the average salaries for direct employees are estimated to range between \$120,000 and  
4 \$150,000 per year, and indirect contractors’ wages and salaries are estimated to average  
5 between \$90,000 and \$110,000. Collectively, the combined annual direct employee and  
6 indirect contractor payroll is estimated to potentially **range between \$40 million and \$46**  
7 **million.**

8           99. The economic ripple effect from Sable’s offshore operations is potentially  
9 significant and multidimensional. The direct payroll infusion of \$40M<sup>119</sup> annually translates  
10 into high-value job creation and regional income growth. Public sector revenues will similarly  
11 rise, supporting core community functions and offsetting fiscal pressures in counties  
12 historically tied to the energy economy. Santa Barbara County, as the principal host of  
13 offshore and treatment facility infrastructure, will be the primary recipient of both direct  
14 economic stimulus and long-term public finance benefits, while San Luis Obispo and Kern  
15 Counties will also share in employment, procurement, and service-related gains.

16           100. Due to the nature of Sable’s production profile, as well as its considerable  
17 operational standards, both direct and indirect jobs are high-paying, skilled positions in  
18 platform operations, marine logistics, environmental safety, and pipeline maintenance. The  
19 majority of these jobs will most likely be concentrated in Santa Barbara County, where the  
20 offshore platforms and the Las Flores Canyon (LFC) treatment facility and Las Flores  
21 Pipeline System control center are located. Many of these employees will live, spend, and pay  
22 taxes locally, contributing significantly to the region’s labor income base and consumer-  
23 driven economic activity. Moreover, the presence of such high-wage positions stimulates  
24 secondary employment effects, including induced demand for housing, transportation,  
25 education, healthcare, and local services. Based on various production volumes and labor  
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27 <sup>119</sup> *Sable Offshore Corp. - Events & Presentations.* (2023). Sableoffshore.com.  
28 <https://sableoffshore.com/events-and-presentations/default.aspx>

1 multipliers in the energy and marine logistics sector, Sable could generate between 1,150 to  
2 25,500 in indirect and induced (contractor and affiliated employees) employment in Santa  
3 Barbara, Kern, and San Luis Obispo counties and statewide as a result of Sable’s offshore  
4 restart. The high average salaries associated with these direct roles also imply elevated  
5 household purchasing power, further driving economic multipliers in retail, hospitality, and  
6 professional services within the local economy. **Sable’s activities, therefore, represent not  
7 only direct income generation but also a mechanism for broader economic revitalization,  
8 particularly in post-pandemic coastal California regions with high service-sector  
9 dependence.**

10 101. Scaling from Sable’s benchmark of 31,500 bpd, supported by approximately 340  
11 direct offshore personnel, the **expansion to a 60,000-bpd production** level would support an  
12 estimated 508 to 652 direct workers, assuming a consistent ratio of 1 employee per 92 barrels  
13 produced daily. Of this projected workforce, the majority would be full-time employees  
14 concentrated in platform operations, marine logistics, environmental oversight, and pipeline  
15 maintenance. Applying industry-standard compensation levels, employees earning \$120,000  
16 to \$150,000 annually with contractors averaging \$90,000 to \$110,000 annually, the total direct  
17 payroll would be \$78.24 to \$97.8 million per year. This would represent one of the largest  
18 wage-driven energy operations in California and likely the United States, injecting massive  
19 purchasing power into local economies through increased housing demand, service  
20 consumption, and tax contributions.

21 102. Coastal counties such as Santa Barbara, Ventura, and San Luis Obispo would see  
22 the most immediate impact due to proximity to offshore infrastructure, marine terminals, and  
23 workforce housing demand. Meanwhile, inland counties like Kern would benefit from  
24 increased activity at Pentland Station as the terminus of the Las Flores Pipeline, expanded  
25 supply chains and service contracts tied to energy logistics, environmental services, and  
26 oilfield technology. In aggregate, Sable’s production could have transformative economic  
27 implications, generating billions in direct revenue, thousands of high-wage jobs, and  
28

significant fiscal resources for public infrastructure and local governments, making it one of the most economically consequential energy projects in California’s modern history.

**vii. Potential Implications of Sable Production on California Oil Prices**

103. Many factors, such as contract terms and negotiation, macroeconomic activity, work and lifestyle habits, and choice of transportation play into the demand for fuels, and prices paid for crude oil and refined products. The most significant determinant, as was so cruelly learned in the 1970s and 1980s, is petroleum supply security. California is virtually at the mercy and held captive to crude supplies from foreign petrostates and is, therefore, highly vulnerable to any disruptions in the supply chain and geopolitical events. Furthermore, California’s use of foreign oil from various sources furthers the political ambitions of those nations, which may be contradictory to the interests of the U.S. and, through the constant use of maritime vessels, contributes significantly to greenhouse gas emission.

104. Despite California’s efforts, the demand for fossil fuels is not declining as quickly as CARB had projected, and in fact, has only declined 11% over a twenty-plus year period. The addition of Sable production from its three offshore platforms and the use of its two existing pipelines would have a favorable impact on California’s energy needs and would help alleviate stresses associated with its dependency on foreign sources. The introduction of Sable production into the California refinery system could have a **favorable economic impact ranging between \$3.283 to \$3.456 a barrel** over imports, depending on the final terms of trade.

**Figure 31**

POTENTIAL INFLUENCE ON CALIFORNIA OIL REFINERY PRICES OF CRUDE STOCK OIL						
Sable Production at Scale (Barrel/day)	Sable Annual Volume(In Barrels)	Share of California In-State Production	Price to Refiners (5%) (\$)	Brent Discount (5%) (\$)	Production-Weighted Average Price with Sable Production	Potential Savings (\$) with Sable Per Barrel
31500	11.50M	10%	65.65	62.37	65.33	3.28
40000	14.60M	12%	65.65	62.37	65.12	3.28
55000	20.08M	15%	65.65	62.37	65.01	3.28

(Source: Calculated)

1 **IV. SUMMARY CONCLUSIONS**

2 **A. Summary and General Conclusion**

3 105. Based on the data, research into prevailing literature, and my analysis, my  
4 conclusion is that the production of oil from Sable’s three offshore platforms and the  
5 associated use of its Las Flores Pipeline System to transport Sable’s production to market will  
6 not irreparably harm the public.

7 106. The addition of production of oil from Sable’s three offshore platforms and the  
8 associated use of its Las Flores Pipeline System to transport its offshore production would  
9 benefit the public because it will have a **favorable economic impact on California’s overall**  
10 **energy situation**, as well as have a favorable influence on local employment and tax  
11 revenues. Furthermore, the addition of production from Sable’s three offshore platforms and  
12 the use of Sable’s Las Flores Pipeline System to transport its production to market would have  
13 a positive influence on consumer retail gasoline, diesel, and aviation fuel prices, would  
14 **improve and strengthen California’s energy and economic security and avoid**  
15 **irreparable harm to consumers.**

16 **B. Pertinent Findings**

17 107. With the continuing decline of in-state oil production, the pending permanent  
18 shutdown of two major oil refineries collectively representing the loss of 10.5 million gallons  
19 of gasoline per day, growing dependencies on non-U.S. sources for oil and, now gasoline, as  
20 well as the highest retail gasoline prices in the U.S., California is confronting a potential  
21 energy crisis.

- 22 • While overall U.S. field production has increased 66% from 1990 levels,  
23 California’s field production declined 61%, and 68% decline from its peak  
24 production in 1985.
- 25 • California is the 2nd largest consumer of petroleum and the largest consumer of  
26 aviation fuel in the U.S.<sup>120</sup> In 2023, Californians consumed over 500 million

27 \_\_\_\_\_  
28 <sup>120</sup> U.S. EIA, Crude Oil Production, Annual, Thousand Barrels, 2023.

1 barrels of oil (1.8 million per day), 13.119 billion gallons of gasoline, 3.6 billion  
2 gallons of diesel fuel, and over 216 million gallons of aviation fuel.

- 3 • Nearly 100% of California’s non-U.S.-sourced imported oil is delivered to its  
4 refineries via maritime vessels, which are significant contributors to GHG  
5 emissions.
- 6 • California is highly vulnerable to oil supplies and prices of foreign providers.  
7 Since 2005, California’s dependency on non-U.S. foreign oil has increased by  
8 19.43%, while its in-state oil production has fallen by 55.22%.
- 9 • California is virtually completely dependent on maritime vessel transportation  
10 for the importing of oil from non-U.S. foreign sources.
- 11 • California’s retail gasoline prices routinely average 50% greater than the U.S.  
12 national average.
- 13 • California’s oil and gas industry represents around 8% of its total GDP and  
14 employs over 148,000 workers directly and over 536,000 indirectly, and  
15 generates around **\$47.9 billion in state and local tax revenues for 2022.**
- 16 • Californians consume between **30 to 33 million gallons of gasoline a day and**  
17 **around 9.9 million gallons a day of diesel fuels. Oil and gasoline**  
18 **consumption in California has not declined significantly over a twenty-five-**  
19 **year period.**
- 20 • California oil and gasoline consumption is relatively inelastic. Since 2001, the  
21 consumption of gasoline has decreased by only 11%; total oil consumption has  
22 decreased by 22% (mostly due to the switch to renewables for power  
23 generation).
- 24 • California is highly dependent on foreign, non-U.S. oil imports to meet its  
25 demand for petroleum-based fuels and other products; California imports of  
26 foreign, non-U.S. sourced oil have increased 69%.
- 27
- 28

- California’s dependency on foreign oil sourced from petrostates such as Iraq, Saudi Arabia, and the U.A.E, as well as Brazil, Ecuador, and Guyana, is expected to increase in the coming years, making the State more vulnerable to geopolitical events and swings in Brent oil market prices.
- California’s dependency on foreign gasoline and diesel fuels sourced from Singapore, India, Japan, South Korea, and China is expected to increase in the coming years, making the State more vulnerable to geopolitical events and disruptions in the supply chain.

### C. Key Conclusions

108. Based on my findings and analysis of Sable and its two existing onshore pipelines, the following conclusions are offered. The use of the Las Flores Pipeline System to carry Sable’s production to market will not irreparably harm the public. **Indeed, to the contrary, as is summarized in this declaration, allowing the use of the Las Flores Pipeline System to carry Sable’s production to market –would benefit the public and avoid irreparable harm to consumers** for the reasons articulated in this declaration and summarized below.

- As configured, Sable is capable of producing 30,000 to 50,000 barrels of oil per day from its three offshore platforms. At this level, Sable’s production would represent approximately **10 to 15% of all California in-state production** based on 2024 levels.
- Sable’s existing Las Flores Pipeline System provides adequate transportation for its offshore production.
- The addition of Sable production using its three offshore platforms and the associated use of its existing Las Flores Pipeline System, indicates that Sable would be **cost competitive** with oil sourced from land-based wells, as well as a number of foreign sources, at various production levels (scale).

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- Sable has immediate and long-term oil reserves that, if placed into production, would create significant economic value to the state of California, as well as Santa Barbara, Kern, and San Luis Obispo counties. The potential impact of production is estimated to range between **\$21.5 to \$41.6 million a year** over a multi-year period depending on production scale.
- The addition of Sable production using its three offshore platforms and the associated use of its existing Las Flores Pipeline System would have a favorable impact and contribution to local employment. Based on various production volumes and labor multipliers in the energy and marine logistics sectors, Sable could generate between **340 to over 7,500** in direct employment, and between 1,150 to 25,500 in indirect (contractor and affiliated employees) employment in Santa Barbara, Kern, and San Luis Obispo counties and statewide as a result of Sable’s offshore restart.
- The addition of Sable production using its three offshore platforms and the associated use of its existing Las Flores Pipeline System would **enhance California’s energy security** through the use of steady-streamed California sourced oil to the remaining California refineries.
- The addition of Sable production using its three offshore platforms and the associated use of its existing Las Flores Pipeline System would introduce **more California oil into the State’s refinery system.**
- **The introduction of Sable production into the California refinery system through the Las Flores Pipeline System could have a favorable economic impact ranging between \$3.283 to \$3.456 a barrel over imports.**

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct. Executed this 7th day of July, 2025, in Los Angeles, California.

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**Michael A. Mische**

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**Exhibit A**

**MICHAEL A. MISCHE**  
**MBA, MS, Cert-AI.**  
**Associate Professor of Professional Practice**

**INTRODUCTION**

Widely quoted in the media, including, The Wall Street Journal, Business Insider, The Washington Examiner, San Jose Mercury News, The Irish Business Post, FOX News, FOX Business, KNX-LA, KFI-LA, CBS and NBC, Professor Michael A. Mische is recognized as one of the world’s foremost authorities on the management consulting oil and gas industries. He has testified as an expert before the Senate, in high-profile litigation and criminal cases involving management consulting, and has been cited in over 1,100 mainstream publications, interviews, reviews, and research papers. He is highly regarded for his Management Consulting Annual Outlook Report, his published research on oil in Venezuela, and for his major publication on Bidenomics, which was the most comprehensive comparative examination of the U.S. economy for the 2019 to 2023 period, and *A Study of California Gasoline Prices* (2025) which is a fifty-year study of the price determinants in the Golden State. In 2023, Michael released his eighth book, “*CasePro: The Consultant’s Critical Thinking Approach to Case Analysis*,” and is the author of seven other books, including a world-wide best-seller with co-author, the late Warren G. Bennis.

Mische joined USC in 1997 as an adjunct professor. Since 2016, Michael has been a fulltime faculty member of the Marshall School of Business, University of Southern California while maintaining an exceptionally high-profile presence as a thought leader in the consulting industry. He is the 2018 recipient of USC’s Golden Apple Award for Teaching Excellence and a co-recipient of the 2019 Service Excellence Award. Mische maintains a highly active consulting profile among elite consulting firms and governments with projects spanning major consulting issues, oil & gas prices, the economy, AI in consulting, and issues related to national economic security.

**POSITIONS HELD (ACADEMIA)**

- **University of Southern California**, Marshall School of Business. Los Angeles, CA. (1997-Present).
  - Associate Professor of Professional Practice & Curriculum Leader: Management Consulting.
    - Faculty Lead for the Certificate in Strategy & Management Consulting.
    - Redesigned consulting curriculum to be more relevant and competitive with Harvard.
    - Designed & implemented a new MOR course offering, *Case Analysis for Consultants: A Critical Thinking Approach*, MOR 499, which provided for interactions between MBAs from the MOR 557 class with UGs from MOR 462.
    - Co-designed & co-teach a new MBA course offering with Prof. Shon Hiatt titled, “*MOR 599- The Business of Energy in the 21<sup>st</sup> Century*.” Scheduled for Spring 2025.

- 1           ○ Co-designed & co-taught, with Jerry Giaquinta, a new course in 2020, (BUCO/MOR
- 2           499), a cross-cultural, project-based course; simultaneously taught via Zoom with ICU in
- 3           Tokyo, Japan.
- 4           ○ Redesigned and upgraded USC’s Certificate in Strategy & Management Consulting.
- 5           (2023).
- 6           ○ Instituted a quantitative national ranking system for MBA consulting programs:
- 7           ▪ Helped to shift USC 2022 Ranking to 9<sup>th</sup>, compared to 2015 which was not in the Top
- 8           30.
- 9           ▪ Helped increase MBA placement in consulting from 16% to 30%. 2015 to 2022.
- 10          ○ **USC Service Activities**
- 11          ○ Conducted recruiting bootcamps for both MBA and MS students for placement into
- 12          consulting. (2023-2024).
- 13          ○ Co-hosted KPMG CEO Paul Knoop on campus for recruiting purposes. (2024).
- 14          ○ Co-leading, with Paul Adler, Deloitte Sustainability Consulting Case. (2024).
- 15          ○ Authored new Experiential Learning Center (ELC) exercise based on an actual
- 16          management consulting situation. (2023).
- 17          ○ Faculty recruiter, USC Football. Speak with non-committed football recruits and their
- 18          families about USC academics and the “life of a student athlete.” (2022-present).
- 19          ○ Faculty Adviser, MCSC, the largest MBA student club at Marshall. (2022-present).
- 20          ○ Implemented career coaching services for MBAs with USC’s Career Resources Center.
- 21          (2023).
- 22          ○ Faculty coach (informal) USC Marshall MBA Black Students Case Competition Team.
- 23          (2022).
- 24          ○ Co-coached (with Carl Voigt) USC Marshall Case Competition Team. (1999 – 2001).
- 25          ○ **USC Teaching Awards**
- 26          ○ USC Golden Apple Teaching Award. (2018).
- 27          ○ MOR Service Award. Co-recipient. (2019).

28          ● **USC Marshall School of Business- Teaching Responsibilities:**

○ <u>MBA-Graduate</u>	<u>Course</u>	<u>Year</u>
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1	MOR 599	The Business of Energy in the 21 <sup>st</sup> Century	2025
	MOR 554	Strategy Innovation & Change	2015- Present
2	MOR 557	Management Consulting	2015- Present
3	MOR 559	Strategic Transformation & Renewal	1997- Present

4	○ <b><u>Undergraduate</u></b>	<b><u>Course</u></b>	<b><u>Year</u></b>
5	MOR 499	<i>New-</i> Case Analysis for Consultants	2022, 2023
	MOR/BUCO 499	Cross Cultural Collaboration- Project Based	2020
6	MOR 473	Leading High-Performance Teams	2016- Present
	MOR 462	Management Consulting	2014- Present
7	BUAD 497	Strategy- Case Based	2014 -2016
8	MOR 463	Organizational Behavior	2013- 2018

9 **POSITIONS HELD- PRIVATE SECTOR (FOR PROFIT)**

- 10 • **Synergy Consulting Group, Inc.** (1993-Present). *CEO & Chairperson of the Board.* Scottsdale, AZ and State College, PA.
  - 11 ○ Significant clients include United States, Kingdom of Saudi Arabia, several Fortune 50s and several Elite 8 management consulting firms.
  - 12
  - 13 ○ Special consultant to HRH, Kingdom of Saudi Arabia. (2020-2022).
  - 14 ○ Special consultant to U.S. Government. (Ongoing).
  - 15 ○ Practice specializations include:
    - 16 ■ Strategic Assessment & Positioning.
    - 17 ■ Organizational Performance.
    - 18 ■ Strategic Innovation .
    - 19 ■ Energy Policy as Related to Oil & Gas.
- 20 • **Andersen Consulting (Accenture).** (1995-2000). *Special Consultant to Senior Practice Leadership & Management Committee of the Firm.* Chicago & Los Angeles.
  - 21
  - 22 ○ Advisor on Global Repositioning & Practice Lines Restructuring relating to “Process Transformation.”
  - 23
  - 24 ○ Co-authored “Building Process Excellence: Lessons from the Leaders.”
  - 25 ○ Co-developed/Contributor to the AC Reengineering & Strategic Planning Methodology.
  - 26 ○ Keynote Speaker: Andersen Partners & Consultants Innovation & Software Spectacular Meeting, San Antonio. (1996).
  - 27 ○ Designated “Associate Partner” for administrative, NDA, and confidentiality purposes.
  - 28

- 1
- 2 • **AT Kearney.** (1991 to 1993). *Principal, Management Consulting Services.* Chicago, IL.
- 3 ○ Special Project- Internal Restructuring and Cost Reduction.
- 4 ○ Special Project- Repositioning Strategic Technology Services for Sale.
- 5 • **KPMG.** (1983 to 1992). *Principal, Management Consulting Services.* Montvale, NJ.
- 6 ○ One of the youngest consulting partners elected in the history of the Firm.
- 7 ○ PIC & Practice responsibilities included leading/co-leading national services in:
- 8 ▪ Strategy & Transformation Consulting.
- 9 ▪ Transactions Management Services (M&A).
- 10 ▪ Innovation & Advanced Technologies.
- 11 ○ Instructor, SDLC and Project Management.
- 12 ○ Co-led/managed over \$58 million in direct engagement billings (Over \$100 million in
- 13 aggregate).
- 14 ○ Maintained one of the highest Net to Gross ratios in the firm.
- 15 ○ Member, KPMG Practices & Methods Review Committee.
- 16 ○ Member, AICPA Peer Review Committee for PwC.

17 **NOTABLE CONSULTING ACTIVITIES (Partial)**

- 18 • **2025.** U.S. Energy Production as Related to Oil & Gasoline Independence.
- 19 • **2024.** Lead Consultant & Expert Witness on behalf of BCG in BCG v. GameStop litigation. (2023-2024).
- 20 • **2024.** Lead Consultant. Bidenomics: Facts, Figures & Everything that Americans Should Know.
- 21 (February 2024).
- 22 • **2023.** Lead Consultant. Analysis of the Implications of the Strategic Petroleum Reserve on U.S. War
- 23 Readiness. Classified. (2023).
- 24 • **2023.** Analysis of California’s Profit Gouging Tax. (January 2023).
- 25 • **2023.** Analysis of Biden Administration’s Oil & Gas Policies. (November 2022).
- 26 • **2023.** Analysis of U. S. Oil & Gas Prices. Oil & Gas Association. Distributed to U.S. Congress.
- 27 (October 2022).
- 28 • **2018-2021.** Kingdom of Saudi Arabia. Lead Advisor for the development of the strategic plan for the
- “Innovation Superhighway” linked to Vision 2030.
- [https://www.vision2030.gov.sa/media/rc0b5oy1/saudi\\_vision203.pdf](https://www.vision2030.gov.sa/media/rc0b5oy1/saudi_vision203.pdf).
- **2018-2021.** Kingdom of Saudi Arabia. Appointed Senior Advisor to the Saudi Public Investment Fund
- (Taqnia), a \$925 billion investment fund for the design and implementation of co-innovation and co-
- investment funding and investment selection processes and organization capable of supporting 13
- different economic sectors. <https://www.pif.gov.sa>.

- 1 • **1997.** Reengineering Government Initiative for Vice President Al Gore. (May- August 1997).

2  
3 **EXPERT TESTIMONY & PANEL PARTICIPATION (Partial)**

- 4 • **2023/2024.** Expert Witness. U.S. Federal District Court. For and on behalf of BCG (Boston Consulting Group) v. GameStop. <https://law.justia.com/cases/federal/district-courts/delaware/dedce/1:2022cv00363/78379/76/>.
- 5 • **2024.** Opined (informal comments) on draft Senate Bill “*To prohibit conflict of interests among consulting firms that simultaneously contract with the Government of the People’s Republic of China and the United States Government, and for other purposes.*”
- 6 <https://www.hawley.senate.gov/sites/default/files/2024-02/Hawley-Time-to-Choose-Act.pdf>.
- 7
- 8 • **2023.** Expert Witness. Testimony before California Senate on California Oil & Gas Price Gouging. (February 22, 2023). See, Mische at 2-hour, 3 min. mark. <https://www.senate.ca.gov/media/senate-energy-utilities-communications-committee-20230222/video>
- 9
- 10 • **2023.** Opined on the “Effects of a Windfall Profit Tax” on U.S. Oil & Gas Competitiveness. United States House of Representatives. Washington, D.C. (January 2023).
- 11 • **2023.** Expert Witness. Presentation before the California Foundation on The Environment and The Economy on why California gasoline prices are higher than national averages and the accretive costs of a windfall profit tax. February 10, 2023. Napa, California.
- 12
- 13 • **2023.** Moderator. “Innovation Factories, Unicorns and Competitive Positioning.” Featuring Linda K. Yates, Author and CEO, Mach 49. (November 2022).
- 14 • **2023.** Expert Witness, California Senate. “Why Are Oil & Gas Prices So High in California?” Californians Against Higher Taxes Press Conference. Carried live and covered by AP. (November 28, 2022).
- 15
- 16 • **Prior 2022 (partial).**
- 17 ○ Material Witness, FARA case. Subpoenaed for and on behalf of the U.S. Government, Southern District of New York (U. S. v. Zuberi). Los Angeles, CA.
- 18 ○ Subpoenaed as material witness on behalf of the U.S. Government in a political financial and foreign influence investigation (FARA).
- 19 ○ Testified before United States Grand Jury, 2019/20.
- 20 ○ Testimony contributed to a conviction and 12-year sentencing in a federal penitentiary on FARA violations. <https://www.justice.gov/usao-cdca/pr/political-donor-sentenced-12-years-prison-lobbying-and-campaign-contribution-crimes-tax>
- 21 ○ Expert Witness, for and behalf of major Fortune 500. Witness in the analysis of movie theater operations as related to the Supreme Court Consent Decree of 1948, 2016/17. Los Angeles, CA.
- 22 ○ Expert Witness, for and behalf of Plaintiff, Magic Chef (Owned by Berkshire Hathaway).
- 23 ○ Expert Witness, for and on behalf of a Private Client. Witness in the analysis of management consulting services, project management and the application of AICPA Code of Professional Ethics as related to management advisory services, 1988. Miami, FLA.
- 24
- 25

26 **MEDIA COVERAGE & CITATIONS: 2022-2025 (partial list)**

- 27 • Quoted or cited over **1,225** times in academic and research works (Academia.com).
- 28 • Quoted over **300** times in the media in 2022 - 2025.

- 1 • **2025.** Mische interviewed. *Fox Business*. University of Southern California Professor Michael Mische  
2 explains his study on gas prices being driven up due to high taxes and policies. (2025, April 4).  
3 <https://www.foxbusiness.com/video/6370989691112>.
- 4 • **2025.** Mische interviewed. *John Kobylt Show; KFI AM 640*. (2025, April 8). *Why Are CA Gas Prices So*  
5 *High?* [https://kfiam640.iheart.com/featured/the-john-kobylt-show/content/2025-04-08-1119-the-john-](https://kfiam640.iheart.com/featured/the-john-kobylt-show/content/2025-04-08-1119-the-john-kobylt-show-why-are-ca-gas-prices-so-high-0408/)  
6 [kobylt-show-why-are-ca-gas-prices-so-high-0408/](https://kfiam640.iheart.com/featured/the-john-kobylt-show/content/2025-04-08-1119-the-john-kobylt-show-why-are-ca-gas-prices-so-high-0408/).
- 7 • **2025.** Mische quoted. *Washington Examiner*. Faria, Z. (2025, April). *California Democrats are*  
8 *responsible for high gas prices*. [https://www.washingtonexaminer.com/opinion/beltway-](https://www.washingtonexaminer.com/opinion/beltway-confidential/3366221/california-democrats-responsible-high-gas-prices/)  
9 [confidential/3366221/california-democrats-responsible-high-gas-prices/](https://www.washingtonexaminer.com/opinion/beltway-confidential/3366221/california-democrats-responsible-high-gas-prices/).
- 10 • **2025.** Mische quoted. *California Globe*. (April 3, 2025). *California’s High Gas Prices Climbing Over*  
11 *\$5.00 Per Gallon – Again*. [https://californiaglobe.com/fr/californias-high-gas-prices-climbing-over-5-00-](https://californiaglobe.com/fr/californias-high-gas-prices-climbing-over-5-00-per-gallon-again/)  
12 [per-gallon-again/](https://californiaglobe.com/fr/californias-high-gas-prices-climbing-over-5-00-per-gallon-again/).
- 13 • **2025.** Mische quoted. *Business Insider*. Thompson, P. (2025, April 8). *5 consulting contracts cut by*  
14 *DOGE show what government is targeting*. [https://www.businessinsider.com/doge-consulting-](https://www.businessinsider.com/doge-consulting-crackdown-what-contracts-are-being-cut-2025-4)  
15 [crackdown-what-contracts-are-being-cut-2025-4](https://www.businessinsider.com/doge-consulting-crackdown-what-contracts-are-being-cut-2025-4).
- 16 • **2025.** Mische quoted. *Pleasanton Weekly*. Hunt, T. (2025, April 10). *USC study confirms state policies*  
17 *drive up gas prices*. [https://www.pleasantonweekly.com/blogs/tim-talk/2025/04/10/usc-study-confirms-](https://www.pleasantonweekly.com/blogs/tim-talk/2025/04/10/usc-study-confirms-state-policies-drive-up-gas-prices/)  
18 [state-policies-drive-up-gas-prices/](https://www.pleasantonweekly.com/blogs/tim-talk/2025/04/10/usc-study-confirms-state-policies-drive-up-gas-prices/).
- 19 • **2025.** Mische quoted. *Daily News*. Board, T. E. (2025, April 6). *Can California get real about high gas*  
20 *prices?* <https://www.dailynews.com/2025/04/06/can-california-get-real-about-high-gas-prices/>
- 21 • **2025.** Mische quoted. *KTLA*. Turner, A., & Sternfield, M. (2025, March 31). *Policies, not greed, driving*  
22 *California’s sky-high gas prices, study finds*. [https://ktla.com/news/california/policies-not-price-gouging-](https://ktla.com/news/california/policies-not-price-gouging-to-blame-for-californias-soaring-gas-prices-study-finds/)  
23 [to-blame-for-californias-soaring-gas-prices-study-finds/](https://ktla.com/news/california/policies-not-price-gouging-to-blame-for-californias-soaring-gas-prices-study-finds/).
- 24 • **2024.** Mische quoted. *Washington Examiner*, “USC estimates California fuel could rise by up to 90 cents  
25 per gallon next year.” (11/20/24). [https://www.washingtonexaminer.com/news/3235752/usc-estimates-](https://www.washingtonexaminer.com/news/3235752/usc-estimates-california-fuel-could-rise-by-up-to-90-cents-per-gallon-next-year/)  
26 [california-fuel-could-rise-by-up-to-90-cents-per-gallon-next-year/](https://www.washingtonexaminer.com/news/3235752/usc-estimates-california-fuel-could-rise-by-up-to-90-cents-per-gallon-next-year/).
- 27 • 2024. Mische quoted. *The Irish Business Post*, “Grant Thornton Irish Partners Mull Debt Deal in Growth  
28 Plan” (July 21, 2024). [https://www.businesspost.ie/news/debt-deal-on-table-as-grant-thornton-mulls-](https://www.businesspost.ie/news/debt-deal-on-table-as-grant-thornton-mulls-overhaul-of-partnership-structure/)  
29 [overhaul-of-partnership-structure/](https://www.businesspost.ie/news/debt-deal-on-table-as-grant-thornton-mulls-overhaul-of-partnership-structure/).
- 30 • 2024. Mische quoted. *The Wall Street Journal*, “Consultants Are Paid to Fix Businesses. Why Can’t They  
31 Fix Their Own? (March 16, 2024). [https://www.wsj.com/lifestyle/careers/consultants-are-paid-to-fix-](https://www.wsj.com/lifestyle/careers/consultants-are-paid-to-fix-businesses-why-cant-they-fix-their-own-1ed9bb04?st=6lijni2puvf4t7s&reflink=desktopwebshare_permalink)  
32 [businesses-why-cant-they-fix-their-own-](https://www.wsj.com/lifestyle/careers/consultants-are-paid-to-fix-businesses-why-cant-they-fix-their-own-1ed9bb04?st=6lijni2puvf4t7s&reflink=desktopwebshare_permalink)  
33 [1ed9bb04?st=6lijni2puvf4t7s&reflink=desktopwebshare\\_permalink](https://www.wsj.com/lifestyle/careers/consultants-are-paid-to-fix-businesses-why-cant-they-fix-their-own-1ed9bb04?st=6lijni2puvf4t7s&reflink=desktopwebshare_permalink).
- 34 • 2024. Mische quoted. *Newsweek*, “Californians Need \$1,000 More To Pay 2025 Gas Prices.” (11/21/24).  
35 <https://www.newsweek.com/california-2025-gas-prices-increase-1989321>.
- 36 • 2024. Mische quoted. *Institute of Energy Research*. “California Gasoline Prices Will Skyrocket.”  
37 (11/29/24). [https://www.instituteforenergyresearch.org/fossil-fuels/gas-and-oil/california-gasoline-prices-](https://www.instituteforenergyresearch.org/fossil-fuels/gas-and-oil/california-gasoline-prices-will-skyrocket/)  
38 [will-skyrocket/](https://www.instituteforenergyresearch.org/fossil-fuels/gas-and-oil/california-gasoline-prices-will-skyrocket/).

- 1 • 2024. Mische quoted. *CBS 8, San Diego*. (11/21/24.) [https://www.cbs8.com/article/news/local/california-](https://www.cbs8.com/article/news/local/california-drivers-gas-costs-2025/509-0ec7e8d0-8d2e-4540-9235-c6620628fcdb)  
2 [drivers-gas-costs-2025/509-0ec7e8d0-8d2e-4540-9235-c6620628fcdb](https://www.cbs8.com/article/news/local/california-drivers-gas-costs-2025/509-0ec7e8d0-8d2e-4540-9235-c6620628fcdb).
- 3 • 2024. Mische quoted. *FOX 11, LA*. (11/20/24). [https://www.foxla.com/news/californians-will-pay-much-](https://www.foxla.com/news/californians-will-pay-much-more-next-year-keep-up-2025-gas-prices-study)  
4 [more-next-year-keep-up-2025-gas-prices-study](https://www.foxla.com/news/californians-will-pay-much-more-next-year-keep-up-2025-gas-prices-study)
- 5 • 2024. Mische interviewed. *860 AM, LA*. (12/26/24).  
6 <https://860amtheanswer.com/news/regional/1f1b8870-c3bd-11ef-8dfd-d3251992d201>
- 7 • 2024. Mische quoted. *Arizona Daily Sun*. “USC estimates California fuel could rise by up to \$1.15 cents  
8 [per gallon next year.](https://azdailysun.com/usc-estimates-california-fuel-could-rise-by-up-to-1-15-cents-per-gallon-next/article_7aa9d45c-a75d-11ef-ae1-df0e25f64341.html)” (11/20/24). [https://azdailysun.com/usc-estimates-california-fuel-could-rise-by-up-](https://azdailysun.com/usc-estimates-california-fuel-could-rise-by-up-to-1-15-cents-per-gallon-next/article_7aa9d45c-a75d-11ef-ae1-df0e25f64341.html)  
9 [to-1-15-cents-per-gallon-next/article\\_7aa9d45c-a75d-11ef-ae1-df0e25f64341.html](https://azdailysun.com/usc-estimates-california-fuel-could-rise-by-up-to-1-15-cents-per-gallon-next/article_7aa9d45c-a75d-11ef-ae1-df0e25f64341.html).
- 10 • 2024. Mische quoted. *Courthouse News Services*. “California Lawmakers Consider Newsom’s Oil Profit  
11 [Penalty.](https://www.mresearch.com/wp-content/uploads/California-lawmakers-consider-Newsoms-oil-profit-penalty-plan-_Courthouse-News-Service.pdf)” (2/23/23). [https://www.mresearch.com/wp-content/uploads/California-lawmakers-consider-](https://www.mresearch.com/wp-content/uploads/California-lawmakers-consider-Newsoms-oil-profit-penalty-plan-_Courthouse-News-Service.pdf)  
12 [Newsoms-oil-profit-penalty-plan-\\_Courthouse-News-Service.pdf](https://www.mresearch.com/wp-content/uploads/California-lawmakers-consider-Newsoms-oil-profit-penalty-plan-_Courthouse-News-Service.pdf)
- 13 • 2023. Mische quoted. *The Wall Street Journal*, “For Once, Rookie Consultants Don’t Have Enough to  
14 [Do.](https://www.wsj.com/articles/consultants-bain-kmpg-ernst-young-boston-consulting-bcg-recruits-layoffs-1a2629fd)” (August 4, 2023). [https://www.wsj.com/articles/consultants-bain-kmpg-ernst-young-boston-](https://www.wsj.com/articles/consultants-bain-kmpg-ernst-young-boston-consulting-bcg-recruits-layoffs-1a2629fd)  
15 [consulting-bcg-recruits-layoffs-1a2629fd](https://www.wsj.com/articles/consultants-bain-kmpg-ernst-young-boston-consulting-bcg-recruits-layoffs-1a2629fd).
- 16 • 2023. Mische quoted. *ExtractingFact.com*, “Three Things Governor Newsom Should Learn from the  
17 [Special Hearing Session.](https://www.extractingfact.com/news/statewide/three-things-newsom-should-learn-from-the-special-session-hearing/)” (March 14, 2023). As University of Southern California professor Michael  
18 Mische put it: “*The fact is, we haven’t proven any cases of price gouging by oil companies or refiners ...*  
19 *As recently as November 2022, we had a court case in the U.S. District Court in San Diego tossed out.*  
20 *The list goes on and on.*” [https://www.extractingfact.com/news/statewide/three-things-newsom-should-](https://www.extractingfact.com/news/statewide/three-things-newsom-should-learn-from-the-special-session-hearing/)  
21 [learn-from-the-special-session-hearing/](https://www.extractingfact.com/news/statewide/three-things-newsom-should-learn-from-the-special-session-hearing/).
- 22 • 2022. Mische quoted. *Seattle Times*, “California Eyes Penalties for Oil Companies Big Profits.”  
23 (December 4, 2022). [https://www.seattletimes.com/business/california-lawmakers-to-meet-eye-big-oils-](https://www.seattletimes.com/business/california-lawmakers-to-meet-eye-big-oils-high-gas-prices/)  
24 [high-gas-prices/](https://www.seattletimes.com/business/california-lawmakers-to-meet-eye-big-oils-high-gas-prices/).
- 25 • 2022. Mische quoted. *San Jose Mercury News*, “Should California Tax Oil Profits.” (November 29,  
26 2022). [https://www.mercurynews.com/2022/11/29/should-california-tax-oil-profits-gas-spike-hearing-](https://www.mercurynews.com/2022/11/29/should-california-tax-oil-profits-gas-spike-hearing-sets-stage-for-contentious-debate/)  
27 [sets-stage-for-contentious-debate/](https://www.mercurynews.com/2022/11/29/should-california-tax-oil-profits-gas-spike-hearing-sets-stage-for-contentious-debate/).
- 28 • 2022. Mische quoted. *Consumer Watchdog*, “Should California Tax Oil Profits: Gas Spike Hearing Sets  
29 [Stage for Contentious Debate.](https://consumerwatchdog.org/news-story/should-california-tax-oil-profits-gas-spike-hearing-sets-stage-contentious-debate)” (November 29, 2022). [https://consumerwatchdog.org/news-story/should-](https://consumerwatchdog.org/news-story/should-california-tax-oil-profits-gas-spike-hearing-sets-stage-contentious-debate)  
30 [california-tax-oil-profits-gas-spike-hearing-sets-stage-contentious-debate](https://consumerwatchdog.org/news-story/should-california-tax-oil-profits-gas-spike-hearing-sets-stage-contentious-debate).
- 31 • 2022. Mische quoted. *East Bay Times*, on oil and gas prices in California. (November 2022).  
32 [https://www.eastbaytimes.com/2022/11/29/should-california-tax-oil-profits-gas-spike-hearing-sets-stage-](https://www.eastbaytimes.com/2022/11/29/should-california-tax-oil-profits-gas-spike-hearing-sets-stage-for-contentious-debate/)  
33 [for-contentious-debate/](https://www.eastbaytimes.com/2022/11/29/should-california-tax-oil-profits-gas-spike-hearing-sets-stage-for-contentious-debate/).
- 34 • 2022. Mische quoted. *ArcaMax Business*, on oil and gas taxes. (November 29, 2022).  
35 <https://www.arcamax.com/business/businessnews/s-2755516-p2>.
- 36 • 2021. Mische quoted. *Politico*, on political pay for play. (February 2021).  
37 <https://www.politico.com/news/2021/02/12/imaad-zuberi-biden-inner-circle-468816>.
- 38 • 2021. Mische quoted. *Washington Examiner*, on FARA conviction. (February 2021).  
39 [https://www.washingtonexaminer.com/news/donor-ties-biden-trump-clinton-obama-sentenced-12-years-](https://www.washingtonexaminer.com/news/donor-ties-biden-trump-clinton-obama-sentenced-12-years-prison)  
40 [prison](https://www.washingtonexaminer.com/news/donor-ties-biden-trump-clinton-obama-sentenced-12-years-prison).

## BOOKS BY MICHAEL MISCHE

- 1 • **2025.** Pending & Under Contract: *Management Consulting: Professional Practice, Responsibility*
- 2 *& Ethics*. Target publication date August 2025.
- 3 • **2023.** *CasePro! The Consultant's Critical Thinking Approach to Case Analysis*. Author. ISBN: 978-1-
- 4 7935-1400-4. (Cognella Publications, January 2023).
- 5 • **2017.** *Management Consulting: Today & Tomorrow*. Contributing Author. ISBN: 978-1-138-12428-8
- 6 (Routledge, 2017).
- 7 • **2000.** *Strategic Renewal: Becoming a High-Performance Organization*. Author. ISBN: 0-13-021919-
- 8 3. (Prentice Hall, 2000). Adopted for use by 8 MBA programs.
- 9 • **1996.** *The 21st Century Organization: Reinventing Through Reengineering*. Co-Authors- Warren
- 10 Bennis & Michael Mische. ISBN: 0-89384-273-7. (Jossey-Bass, 1996). Reached Top-25 on both U.S.
- 11 and international best seller's list, published in 5 languages.
- 12 • **1996.** *Reengineering Systems Integration Success, Volumes 1 & 2*. Editor. ISBN: 1-8493-9952-1.
- 13 (Auerbach, 1997- 1999).
- 14 • **1996.** *Step-by-Step Reengineering: The Comprehensive Guide to Process Change*. Author. ISBN:
- 15 0-8839-0476-4. (Jossey-Bass, 1996). This book was adopted by virtually every major consulting
- 16 firm and has served as a foundation for many firms' proprietary methodologies. Also used by
- 17 President Clinton & Vice President Al Gore in their "Reinventing Government," initiative. (1992-
- 18 94). See, <https://www.govexec.com/management/2013/04/what-reinvention-wrought/62836/>
- 19 • Contributing author and/or editor to 3 other books (Auerbach) on process and system integration.

#### 14 PAPERS BY MICHAEL MISCHE (partial)

- 15 • **2025.** "A Study of California Gasoline Prices and The Potential Implications of The California Gasoline
- 16 Reserve." USC Business of Energy Transition Initiative (BET). (March 16, 2025).
- 17 • **2024.** "Not All Oil is Created Equally: Understanding the Venezuela Petrostate." USC Business of
- 18 Energy Transition Initiative (BET). (September 2024).
- 19 • **2024.** "Bidenomics...Facts, Figures and Everything Americans Should Know." Co-authored with Torri
- 20 Kyes. Over 40,000 reads as of September 1, 2024. (February 2024).
- 21 • **2024.** "Is Venezuela the Answer to U.S. Oil Woes?" USC Business of Energy Transition Initiative. (May
- 22 2024) (BET).
- 23 • **2024.** "Understanding the Implications of Iranian Oil & U.S. Sanctions: What the Facts, Figures &
- 24 Data Tell Us." Oil & Gas Association. (April 2024).
- 25 • **2024.** "2024 Management Consulting Annual Outlook." Over 40,000 reads. (January 2024).
- 26 • **2024.** "Management Consulting Annual Outlook & Firm Rankings: 2024." Over 40,000 reads. (January
- 27 2024).
- 28 • 2023. "The Fiction, Fallacy, Facts & Realities of California's Profit Gouging Tax." (January 2023).
- 2023. "When it Comes to Energy the Stupidity of Biden Administration Knows No End." (Feb. 2023).
- 2023. "Twenty-five Questions that all Americans Should Ask About Oil & Gas Prices." Oil & Gas
- Association. (Oct. 2022).
- **Prior Papers: 1984 to 2022 (Partial List)**
  - "Ranking the Top MBA Programs for Management Consulting." (2018, 2019, 2020, 2021).
  - "A Comparative Survey of Top Twenty MBA Management Consulting Programs." (2018).

- 1 ○ “Federal Tax Implications of Unclaimed Property,” (TAF, 2014).
- 2 ○ “Alternative Asset Class Investments: The Case for Classic Cars.” (SCG, 2013).
- 3 ○ “The Contagion Effect of Greek Default & It’s Impact on the Eurozone: A Working Paper,” (2013).
- 4 ○ “Innovation: The Engine of Strategic Renewal.” (Accenture, 1996).
- 5 ○ “Symptoms of a Terminally Ill Integration Project,” (Auerbach, 1997- 1999).
- 6 ○ “Transnational IT Architecture,” (Auerbach 1997- 1999).
- 7 ○ “Building Process Excellence: Lessons from The Leaders.” (The Economist/EIU, 1996).
- 8 ○ “Remedies to Wrongful Seizure: A Discussion of IRS Liens & Levies.” Jerome Horvitz and Michael Mische. (Warren Gorham & Lamont, 1984.)

## 8 **EDUCATION**

- 9 • **Massachusetts Institute of Technology**, Sloan School of Management. MA. (August 2020).
  - 10 ○ Certificate, Executive Education Program, AI: Implications for Business Strategy.
  - 11 ○ Modules completed included:
    - 12 ■ Introduction to AI
    - 13 ■ Machine Learning in Business
    - 14 ■ Natural Language Processing in Business
    - 15 ■ Robotics in Business
    - 16 ■ AI in Business and Society
    - 17 ■ The Future of AI
- 18 • **New York University**, Stern School of Business. NY, NY. (February 1978).
  - 19 ○ Master of Business Administration, Finance. Minor: Management.
  - 20 ○ Completed both BS & MBA is less than 5 years.
  - 21 ○ Thesis: “Business Cycles & Capital Investment Theory.” Advisor, Prof. Robert Kavesh, Chairman, NYU Economics Dept.
  - 22 ○ Honors Paper: “Price Level Adjusted Financial Statements.” Advisor, Prof. Barbara Marino.
  - 23 ○ NYU Graduate Assistant to Prof. Alexander Melamid & Prof. Rolf E. Wubbles.
- 24 • **Golden Gate University**, Graduate School of Taxation. San Francisco, CA. (June 1984)
  - 25 ○ Master of Science, Federal Taxation.
  - 26 ○ Publications: “Remedies to Wrongful Seizure. ” (Warren, Gorham & Lamont. 1984).
- 27 • **New York University**, Stern School of Business. NY, NY. (October 1976).
  - 28 ○ Bachelor of Science, with Honors in Banking & Finance.
  - Double Major: Finance & Economics.
  - Minor: Political Science (Soviet Economic System).

- 1 ○ Honors Thesis: “Industry Analysis of Nonferrous Metals,” Advisor, Prof. Rolf E. Wubbles.
- 2 ○ Five-year accelerated BS/MBA degree program (Awarded MBA at age of 23).
- 3 ○ Recipient: Jules Bachman & Boris Kostelanetz Academic Scholarships - Economics.
- 4 ○ Beta Gamma Sigma & Phi Alpha Kappa, national academic honors societies.
- 5 ○ Student Athlete. NYU Men’s Varsity Swimming Team.
- 6 ○ Vice President, NYU Finance Society.
- 6 ○ Member, Phi Gamma Delta.

7  
8 **COMMUNITY SERVICE ACTIVITIES (Partial)**

- 9 ● Active in sexual assault prevention initiatives and counseling young men. (On-going.)
- 9 ● Active financial supporter, LA Catholic Good Shepard Shelter for Battered & Abused Women. (On-
- 10 going).
- 10 ● Active financial supporter, USC Women’s Basketball. (On-going).
- 11 ● Active financial supporter, Phi Gamma Delta Educational Scholarship Fund. (1980 to present).
- 12 ● Passionate supporter of Title IX initiatives for women athletics. (1977-present).
- 13 ● Past Member, City of Pasadena, “We Must Breathe Task Force,” for police reform and underrepresented economic opportunity programs. Chaired by the late Council Member, John J. Kennedy. (2020).

14  
15 **MISCELLANEOUS AWARDS (Partial)**

- 16 ● “Man, of the Year,” elected by the NYU Chapter. (1992).
- 17 ● Nominated for “Who’s Who in America.” (2001, 2024).
- 18 ● Nominated for “Who’s Who in American Business.” (2011, 2024).
- 19 ● “Most Influential Graduate Brother of the Year.” (2023).

20  
21 **BOARD MEMBERSHIPS**

- 22 ● Due to the potential for conflicts of interest and publicity, Michael restricts his for-profit board affiliations to private organizations.
- 23 ● Past non-profit board affiliations include, but are not limited to:
  - 24 ○ NYU-Stern, Annual Alumni Fund. Co-Chairman. (1990-91).
  - 24 ○ NYU-Stern, Haskins Fund. Board Member. (1992).
  - 25 ○ NYU-Stern, Dean’s Advisory Board. Board Member. (1988-1992).
  - 25 ○ NYU-Stern, New Building Fund Board. Fundraiser. (1990-1992).
  - 26 ○ Phi Gamma Delta Educational Foundation. Board Member. (1990-1994).
  - 26 ○ Gamma Phi House Corporation. Board Member. (1990-2001).

27  
28 **PERSONAL INTERESTS**

- 1 • Lifetime Member: International Fraternity of Phi Gamma Delta. Member. (1973 – present).
- 2 • Interesting Fact: Former elite-level two-sport athlete. (1969-1975).
- 3 • Passions: Classic American muscle cars, Formula 1 racing, writing, American military history,  
4 architecture, classical music, weightlifting, boxing, developing consulting talent, and PSU & USC  
5 football.
- 6 • Most notable influences: NYU Profs. Alexander Melamid, Rolf. E. Wubbels, Wassily Leontief (Nobel  
7 Recipient), & Ed Altman; KPMG Partners CEO Larry D. Horner & Hilliard M. Eure-III; my incredible  
8 athletic coaches & trainers; and most of all, my mother, Jane and father, Albert.

### 9 **LINKS**

- 10 • <https://www.linkedin.com/in/michael-a-mische-987b30a/>
- 11 • <https://www.youtube.com/watch?v=dC5lLcSK-1I&t=13s>
- 12 • <https://www.youtube.com/watch?v=HvP2ELGHdjQ>
- 13 • <https://www.youtube.com/watch?v=2Rv7l2qhCSw&t=12s>

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**PROOF OF SERVICE**

I, Josie Cisneros, declare:

I am employed in the County of Los Angeles, State of California. I am over the age of 18 and not a party to the within action. My business address is Alston & Bird LLP, 350 South Grand Avenue, 51st Floor, Los Angeles, CA 90071.

On July 7, 2025, I served the document(s) described as **DECLARATION OF MICHAEL A. MISCHE IN SUPPORT OF REAL PARTIES’ OPPOSITION TO PRELIMINARY INJUNCTION** on the interested parties in this action by enclosing the document(s) in a sealed envelope addressed as follows: *See Attached Service List.*

- BY ELECTRONIC MAIL TRANSMISSION WITH ATTACHMENT: On this date, I transmitted the above-mentioned document by electronic mail transmission with attachment to the parties at the electronic mail transmission address set forth on the attached service list.
- [State] I declare under penalty of perjury under the laws of the State of California that the above is true and correct.

Executed on July 7, 2025, at Los Angeles, California.

*/s/ Josie Cisneros*

---

Josie Cisneros

1 **SERVICE LIST**

2 Julie Teel Simmons, Esq.  
3 David Pettit, Esq.  
4 Talia Nimmer, Esq.  
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7 Oakland, CA 94612

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18 San Francisco, CA 94102

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