

A Different Kind of Energy Company

By John Benson

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1. Introduction

There is an incorrect assumption that large corporations are fleeing our state in droves. A few are moving their headquarters out of California (I would guess because our taxes are rather high), but continue to have major facilities in our state (read: Tesla).

But what about Energy Companies? After graduation (BSEE, Texas Tech University), I started my career with Rockwell Atomics International in Southern California. After a couple of years I moved to GE Nuclear near Livermore, CA (my hometown then and now). Both of these were major energy companies, and still participate in this sector, although GE moved most of its nuclear business to the east coast as part of a consolidation two or three decades ago. Also a new type of Energy Company may be emerging in California: a traditional oil & gas extraction company that appears to be trying very hard to evolve into an energy company of the future.

California Resources Corporation (CRC) is a different kind of Energy Company. We are dedicated to serving Californians by producing ample, safe and reliable energy and actively promoting conservation of water, habitat and energy as a responsible steward of natural resources. CRC has some of the lowest carbon intensity production in the US and we are focused on maximizing the value of our land, mineral and technical resources for decarbonization by developing carbon capture and storage (CCS) and other emissions-reducing projects...¹

Based on the above paragraph from their website, and about 95% of the rest of the content on this site, we might think they are succeeding. However, they have deep roots in traditional oil and gas extraction. Is this the path-forward or a very good job of greenwashing? You be the judge.

2. The Old CRC

California Resources Corporation is a company engaged in hydrocarbon exploration in California. It is organized in Delaware and headquartered in Los Angeles. It has the largest privately held mineral acreage position in California.²

¹ California Resources Corporation, “Environmental, Social And Governance (ESG),” <https://www.crc.com/esg/default.aspx>

² Wikipedia Article on California Resources Corporation, https://en.wikipedia.org/wiki/California_Resources_Corporation, and United States Securities and Exchange Commission, Form 10K for California Resources Corporation, for Fiscal Year Ended Dec 31, 2021, <https://www.sec.gov/ix?doc=/Archives/edgar/data/1609253/000160925322000010/crc-20211231.htm>

The company has conventional primary, enhanced oil recovery, and unconventional operations in the San Joaquin Basin, Ventura Basin, and Los Angeles Basin and dry gas production in the Sacramento Basin. Its largest holding is the 47,000-acre Elk Hills Oil Field, 20 miles west of Bakersfield, California in the San Joaquin Valley. It is also operates the Wilmington Oil Field in partnership with California, several smaller fields in Los Angeles County, and the Huntington Beach Oil Field in Orange County, California.

As of December 31, 2021, the company had 480 million barrels of oil equivalent (2.9x10⁹ GJ) of estimated proved reserves, of which 71% was petroleum, 20% was natural gas, and 9% was natural gas liquids.

The company was formed in April 2014 as a corporate spin-off of Occidental Petroleum. In April 2018, the company acquired the interest in the Elk Hills Oil Field previously held by Chevron Corporation for \$460 million and 2.85 million shares. In July 2020, the company filed bankruptcy with \$5 billion in debt; it emerged from bankruptcy in October 2020. In March 2021, Mark A. ("Mac") McFarland was appointed CEO...

3. The Transition

After digging back several pages into my search engine's results for California Resources Corporation, I found a recent good article from Yahoo Finance about the transition. Excerpts from this is below, but are scarcely decisive.

California Resources Corporation (NYSE: CRC) ("CRC" or the "Company") announced today a strategic realignment of the Company's business operations and structure. The Company intends to reduce costs to align with activity levels, increase its financial flexibility and optimize its portfolio of assets. The Company believes that the combination of these actions will allow it to continue to strengthen shareholder returns. The Company is also repositioning the business to capitalize on future opportunities with Carbon TerraVault. In conjunction with this strategic realignment, the Company also announced that Francisco Leon, currently Chief Financial Officer, will succeed Mark A. ("Mac") McFarland as President and Chief Executive Officer and join the Company's Board of Directors, effective at the Company's 2023 Annual Meeting in April.³

"As demonstrated by our 2022 year-end financial results, CRC has a very resilient and valuable portfolio of assets," Mr. Leon said. "While the Company's financial performance has been strong, our market has evolved and therefore we are adjusting accordingly by optimizing our capital plan and increasing our focus on reducing costs. We believe our revised plan will enhance shareholder returns while positioning the Company for continued success into the future."

The revised plan realigns CRC's operating strategy while adjusting the Company's corporate and management structure as set forth below:

Revised Corporate Structure - CRC will adjust its corporate operating structure to facilitate the separate operations of its Exploration and Production (E&P) and carbon management businesses. This change will allow investors and other CRC stakeholders to garner a better awareness and understanding of the Company's discrete businesses as CRC's leadership continues efforts to maximize shareholder value across the portfolio of assets.

³ Yahoo Finance, "California Resources Corporation Initiates Strategic Realignment of Business Operations and Corporate Structure to Maximize Cash Flow Per Share," Feb 24, 2023 <https://finance.yahoo.com/news/california-resources-corporation-initiates-strategic-120100207.html>

Accelerate Carbon Management Business - CRC will manage its carbon management business on a standalone basis over time, providing the flexibility to consider strategic options including a potential separation from the E&P business. This is a natural evolution given the great strides made in 2022, including the formation of Carbon TerraVault's joint venture with Brookfield Renewable. The joint venture was formed to create a partnership focused on carbon capture and sequestration development, along with carbon management service agreements with parties such as Lone Cypress Energy and Grannus, LLC, to provide permanent carbon storage. In 2023, CRC is focused on signing up additional emitter projects, advancing CalCapture and the California Direct Air Capture Hub, and submitting additional Class VI permit applications. CRC has also established a separate board for the Carbon TerraVault subsidiary to focus on growing and developing the carbon management business.

Leadership Changes - With the revised corporate structure, Mr. Leon will assume the CEO position, effective at the Company's Annual Meeting. As CFO, Mr. Leon has been instrumental in the creation of the Company's carbon management business. He also has a deep knowledge and understanding of CRC's extensive E&P business. As such, Mr. Leon is extremely well positioned to lead CRC in the years ahead. In May, Mr. McFarland will transition to his former role as a non-executive director and will also serve as non-executive Chair of the newly formed Board of the Carbon TerraVault (CTV) subsidiary. Two existing CRC non-executive directors, Andrew Bremner and James Chapman, will also serve on that subsidiary board. The Company has an ongoing search for a new CFO.

Future E&P Development Activity - The Company will reduce its rig count to 1.5 in 2023 with a drilling program focused on developing the highest-returning projects with permits-in-hand in conjunction with a continued focus on well servicing and downhole maintenance to reduce the base production decline to approximately 5 to 7 percent. At the planned rig pace, CRC can enhance the operational and capital efficiency of its rig program and maximize the Company's ability to return capital to shareholders. On a go-forward basis utilizing a 1.5 rig program, CRC expects to spend ~\$155 million in exploration & production (E&P) drilling and completions and workover capital. This level of spending excludes one-time items and carbon management businesses (CMB) capital which is anticipated to be funded by projected CTV JV contributions over time.

Focus on Cost Reductions and Value Enhancing Portfolio Optimizations – CRC's leadership team, working closely with the Special Finance Committee of the Board, is focused on cost reduction initiatives across the Company that align with the projected level of activity and revised strategic direction. CRC is targeting a 5% - 10% reduction in non- energy operating costs (excluding downhole maintenance) and Adj. E&P Corp & Other G&A on a combined basis by year end. These cost reduction initiatives in conjunction with increased downhole maintenance target maintaining margins and driving higher cash flows. CRC's leadership team and Board have successfully implemented similar strategies and believe the Company is well positioned to identify and achieve cost reductions while maintaining the high operational standards that CRC has achieved. In addition, CRC will continue to pursue the monetization of its Huntington Beach surface acreage as well as other real estate surface ownership in its portfolio...

CRC's strategy is repeatable with a focus on maximizing cash flow per share - So long as the current conditions persist, the Company expects to repeat its strategy. This means continuously focusing its activity on locations where the Company has permits in hand, re-aligning costs with activity levels and maintaining its financial flexibility. CRC believes that the repeatable nature of the strategy will allow the Company to continue prioritizing returning cash to shareholders through share repurchases and dividends.

4. CRC Environmental, Social & Governance (ESG)

Shared California Values: *CRC proudly shares and endorses the state's commitment to conserve our natural resources, mitigate climate change and protect our environment. We design and maintain our facilities throughout the state with our neighbors, communities and the environment in mind. At CRC, our values of Character, Responsibility and Commitment direct how we conduct our business, contribute to our communities, support local economies, protect the environment, and interact daily with our stakeholders. CRC increases our energy security by reducing the state's chronic dependence on imports and helps California retain the value created by local energy production. CRC is dedicated to helping our diverse communities across our state have a vibrant and sustainable future.*

4.1. Full Scope Net Zero

CRC is committed to the transition in the energy sector. Building upon the company's carbon management strategy, in November 2021, CRC adopted a 2045 Full-Scope Net Zero goal for Scope 1, 2 and 3 emissions. This goal places CRC among a select few industry peers to include scope 3 emissions in their Net Zero goal. In addition, CRC's 2045 goal puts the company on a timeframe five years sooner than most other companies' Net Zero goals and aligns CRC with the state of California's 2045 net zero ambitions.

CRC defines Net Zero as achieving permanent storage of captured or removed carbon emissions in a volume equal to all of our Scope 1, 2, and 3 emissions by 2045. We intend to achieve this goal by prioritizing 50% of our free cash flow to invest in projects that reduce our direct and indirect emissions or achieve sequestration of carbon in volumes necessary to offset these emissions.

Scope 1 emissions are direct greenhouse gas (GHG) emissions associated with sources controlled or owned by an organization such as fuel combustion in boilers, furnaces, vehicles, etc. Scope 2 emissions are indirect GHG emissions associated with the purchase of electricity, steam, heat, or cooling. Although scope 2 emissions physically occur at a facility where they are generated, they are accounted for in an organization's GHG inventory because they are a result of the organization's energy use. Scope 3 includes all other indirect emissions that occur in a company's value chain. This includes emissions from purchased goods or services, business travel, employee commuting, waste disposal, use of sold products, transportation and distribution.

CRC is one of the best positioned companies in the energy sector. The company's strong operational and financial performance enables it to produce stable, low-carbon fuel and invest meaningful Environmental, Social and Governance (ESG) projects such as Carbon TerraVault I that will help California achieve its ambitious emissions reduction goals today and in the future.

4.2. Methane Reduction

CRC's updated Methane Emissions Reduction Goal commits the company to further reduce methane emissions by 30% from our 2020 baseline by 2030. This goal builds on our previous methane reduction goal to lower methane emissions by 50% from our 2013 baseline by 2030, which we surpassed in 2018, 12 years ahead of schedule. Because we have been able to achieve significant methane reductions to date, our updated methane goal significantly exceeds California's own 2030 methane reduction goal.

CRC's leadership on methane emissions reduction is the major reason why our low carbon intensity fuel is ranked by the Clean Air Task Force⁴ as the lowest carbon intensity of the top 100 producers in the US, and by extension in California. Our continued focus on reducing methane emissions will ensure we provide low carbon intensity fuel for Californians throughout the energy transition.

4.3. Freshwater Reduction

CRC's Freshwater Usage Reduction Goal aims to reduce freshwater usage in our low carbon intensity fuel production by 30% from our 2022 baseline by 2025 – exceeding California's voluntary 15% water use reduction target.

CRC consistently produces more water for California water districts (approximately 5 billion gallons of treated, reclaimed water in 2021) than we consume for our own operations, which means we are a net water provider. Given the water challenges California faces, CRC will continue to provide water safely and reliably for the state while we advance our focus on further reducing our consumption.

4.4. Leadership Diversity

Our Ethnic, Racial and Gender Diversity in Leadership Goal further prioritizes diversity in CRC leadership positions and on the Board of Directors by 2030:

- Advance ethnically and racially diverse professionals in leadership positions*
- Increase gender diverse professionals in leadership positions*
- Maintain current board composition with ethnically, racially and gender diverse board members*

In addition, CRC conducts annual assessments to promote gender pay equality. CRC believes a diverse workforce is key to successfully leveraging all talent towards producing low carbon intensity fuel.

4.5. Community Giving

CRC's Community Giving Goal exceeds many of our sector peers on a donation per revenue basis and further gives back to our local California communities where we produce low carbon intensity fuel and develop carbon management initiatives. Since 2015, CRC has provided more than \$15 million in cumulative contributions to local non-profits and organizations, and we are proud to continue investing in our communities where we live and work. Strong communities underwrite safe local production of fuel that is critical to California's energy security and meeting the state's GHG goals. A 100% California "field-to-fuel" strategy displaces foreign sources of fuel that have higher carbon intensity than local production, do not benefit local communities and do not meet California's world-leading safety, labor, human rights and environmental standards.

⁴ See <https://www.catf.us/about/>

4.6. Executive Pay

CRC's Executive Pay Goal links 30% of executive annual incentive pay related to company performance to ESG metrics, among the highest ESG weighting in the industry, underscoring the commitment of CRC's leadership to achieving our ESG goals.

CRC's 2045 Full-Scope Net Zero and updated methane, water, diversity, community giving and executive pay ESG goals are designed to meet or exceed California's high standards for corporate and social sustainability. Our goals demonstrate CRC's continued strong commitment to leading the energy transition while providing safe and reliable energy sources necessary to help ensure better human welfare and a more inclusive and equitable economy and society.

5. California DAC Hub

Carbon TerraVault Holdings, LLC (CTV), a subsidiary of California Resources Corporation (CRC), has assembled a consortium of organizations across industry, technology, academia, national labs, community, government, and labor, to pursue U.S. Department of Energy (DOE) funding under its Regional Direct Air Capture (DAC) Hubs Initiative to create the California DAC Hub, the state's first full-scale DAC plus storage (DAC+S) network of regional DAC+S hubs. DAC+S is a solution that can remove a then permanently store atmospheric carbon dioxide (CO₂) using low carbon emission energy and provide economic benefits to surrounding communities.⁵

5.1. Aug 2023 Update

The California DAC Hub is selected to receive \$11.8 million in funding from the DOE. This funding will be used to perform Front End Engineering Design studies in 2024 on the first proposed DAC facilities in Kern County, California.

5.2. Benefits

The California DAC Hub will help accelerate the Golden State's climate leadership and achieve its carbon neutrality goal, and prioritize surrounding under-represented California communities through transformative benefits potentially including local air quality improvements from helping optimize the use of renewable energy; utilization of reclaimed water and/or production of new water; quality union jobs in construction and low carbon energy technologies; and science, technology, engineering, and math (STEM) and energy transition education programs.

Through the California DAC Hub, the consortium will pursue funding to develop a network of DAC+S hubs across the state under the DOE's Regional DAC Hubs Initiative, as outlined under the \$3.5 billion Funding Opportunity Announcement (FOA), to accelerate the commercialization of atmospheric CO₂ removal via integrated capture, processing, transport, and secure geologic storage. CO₂ from DAC+S hubs will not be used for enhanced oil recovery.

⁵ <https://www.crc.com/carbon-terravault/projects/california-dac-hub/default.aspx>



Key to the success of the California DAC Hub will be strong relationships with diverse community stakeholders to develop an equitable, just, and environmentally responsible approach to the project.

Non-profit energy research and development institute EPRI submitted an application to the DOE on March 13, 2023, as specified in the FOA instructions on behalf of the California DAC Hub consortium, including consortium lead CTV Direct, LLC, a wholly owned subsidiary of CTV focused exclusively on DAC+S, and community benefits plan lead Kern Community College District (Kern CCD). On August 11, 2023, the California DAC Hub was selected to receive \$11.8 million in funding from the DOE. This funding will be used to perform Front End Engineering Design (FEED) studies in 2024 on the first proposed DAC facilities in Kern County, California, followed up with additional funding requests and planned development and construction potentially beginning in 2025.

Following the first hub in Kern County, the consortium will look to expand to other locations across the state. Each hub will provide benefits to surrounding communities, such as high-paying and permanent jobs and training programs for reskilling workers, to help California progress toward its 2030 and 2045 carbon removal goals.

6. Consortium Members

Led by CTV Direct, Kern CCD and EPRI, the consortium includes the following organizations and may expand as appropriate based on further community engagement and future regional hub locations:

6.1. Industry & Technology

Accenture, AECOM, Avnos, Bloom Energy, Brookfield Renewable, Carbon TerraVault, EPRI, Climeworks, GeothermEx, GreenFire Energy, Pacific Gas and Electric (PG&E), Sage Geosystems, and Southern California Gas Company (SoCalGas).

6.2. Academia

Bakersfield College, California State University, Bakersfield (CSUB), Taft College, and the University of California, Los Angeles (UCLA) Institute for Carbon Management.

6.3. National Labs

Lawrence Livermore National Laboratory (LLNL), Livermore Lab Foundation (LLF), National Renewable Energy Laboratory (NREL), and Pacific Northwest National Laboratory (PNNL).

6.4. Community

African American Network of Kern County (AANKC), B3K Prosperity, Community Action Partnership of Kern (CAPK), Grandma Whoople Enterprises, Greater Bakersfield Chamber of Commerce, KernCCD, Kern County Black Chamber of Commerce, Kern County Hispanic Chamber of Commerce (KCHCC), Kern Economic Development Corporation (KEDC), Mexican American Opportunity Foundation (MAOF), National Impact Mentoring and Training Program (NIMTP), The Open Door Network, Tejon Indian Tribe, and the West Side Recreation & Park District.

6.5. Government

City of Bakersfield and the West Kern Water District (WKWD).

6.6. Labor

Employers' Training Resource (ETR), International Brotherhood of Electrical Workers (IBEW) - Local 428, International Union of Operating Engineers - Local 12, Kern, Inyo, Mono Counties Building Trades Council, and the State Building and Construction Trades Council of California (SBCTC).

Final author's comment: CRC and especially the DAC hubs appear to be poised to provide a boost to climate change mitigation. CRC also appears to have values that are strongly aligned with California.

There are many California Corporations that are highly profitable, and we are OK with this, as long as they do not derive their profit in a manner that conflicts with our values, and/or evolve their businesses to be more sustainable and beneficial in the future. Thus it also OK for CRC to be more profitable in the future.

Also, we are not ready to turn off the tap on oil and gas production in the immediate future, thus the Exploration and Production functions within CRC will be beneficial, as long as they are able to reduce production as the need for these fuels diminish. CRC's clean fuel production will also be useful during the transition from today's petro-fuel to zero-carbon future. This will also allow existing vehicles to operate during the transition and thereafter.