1	IN THE UNITED STATES DISTRICT COURT				
2	FOR THE EASTERN DIST	TRICT OF CALIFORNIA			
3					
4	ROCKY MOUNTAIN FARMERS UNION,	CASE NO. CV-F-09-2234 LJO DLB			
5	REDWOOD COUNTY MINNESOTA CORN AND SOYBEAN GROWERS, PENNY	6.152 1.6. 6. 1 6, 226. 206 222			
	NEWMAN GRAIN, INC., GROWTH ENERGY,	ORDER ON DEFENDANT'S MOTION TO			
6	RENEWABLE FUELS ASSOCIATION, REX NEDEREND, FRESNO COUNTY FARM	DISMISS (Doc. 23)			
7	BUREAU, NISEI FARMERS LEAGUE, and CALIFORNIA DAIRY CAMPAIGN,				
8	Plaintiffs,				
9	VS.				
10					
11	JAMES N. GOLDSTENE, Executive Officer of the California Air Resources Board,				
12	Defendant.				
13					
14	NATIONAL PETROCHEMICAL &	CASE NO. CV-F-10-163 LJO DLB			
15	REFINERS ASSOCIATION, AMERICAN TRUCKING ASSOCIATIONS, CENTER	ORDER ON DEFENDANTS' MOTION TO			
16	FOR NORTH AMERICAN ENERGY SECURITY, and THE CONSUMER	DISMISS (Doc. 25)			
17	ENERGY ALLIANCE,				
	Plaintiffs,				
18	VS.				
19	JAMES GOLDSTENE, Executive Officer				
20	of the California Air Resources Board, MARY D. NICHOLS, DANIEL SPERLING,				
21	KEN YEAGER, DORENE D'ADAMO, BARBARA RIORDAN, JOHN R. BALMES,				
22	LYDIA H. KENNARD, SANDRA BERG,				
23	RON ROBERTS, RONALD O. LOVERIDGE, member of the California				
24	Air Resources Board; ARNOLD SCHWARZENEGGER, Governor of the				
25	state of Caliofrnia, and EDMUND BROWN, Attorney General of the state of California,				
26	Defendants.				
27					
28	and related intervenor actions and amici.				
۷٥					
	1				

INTRODUCTION

Plaintiffs challenge the low carbon fuel standard ("LCFS") regulations promulgated by defendant California Air Resource Board ("CARB")¹ to implement provisions of California Assembly Bill 32 ("AB 32"), California's Global Warming Solutions Act of 2006, Cal. Heath & Saf. Code, §38500 et seq. California's LCFS focuses on the "carbon intensity" of fuels to estimate emissions related to a fuel's lifecycle, including greenhouse gases ("GHGs") emitted when the fuel is extracted, refined, and transported to California. Plaintiffs allege that the LCFS conflicts with and is preempted by federal law, including the Energy Independence and Security Act of 2007 ("EISA"), in violation of the Supremacy Clause, U.S. Const. Article VI, para. 2, and interferes with the regulation of interstate commerce, in violation of the Commerce Clause, U.S. Const., Art. I, sec. 8, cl. 3.

In moving to dismiss this action, pursuant to Fed. R. Civ. P. 12(b)(6), defendants argues that the United States Congress expressly authorized California to regulate fuels under the Clean Air Act, 42 U.S.C. §7401 et seq.. Defendants rely on 42 U.S.C. §7545(c)(4)(B) ("Section 211(c)(4)(B)"), and Clean Air Act savings clauses, to contend that because Congress has granted California express authority to regulate fuels, the LCFS cannot be preempted by federal law. Moreover, defendants assert that Section 211(c)(4)(B) authorizes California to violate the dormant Commerce Clause.

Having considered the parties' arguments, amici curiae briefs, and relevant legal authority, this Court finds that Section 211(c)(4)(B) provides no express authority for California's LCFS. Section 211(c)(4)(B), a narrow preemption exemption related to the regulation of "components of fuel and fuel additives," coextensive with the preemption provision of Section 211(c)(4)(A), is inapplicable to the LCFS. Moreover, plaintiffs state a claim that the effects of California's LCFS conflict with Section 211(o) of the Clean Air Act to satisfy their burden of pleading a preemption cause of action. In addition, this Court rejects defendants' contention that Section 211(c)(4)(B) authorizes California to violate the Commerce Clause. Accordingly, this Court DENIES defendants' motions to dismiss.

¹ Collectively, defendants are James N. Goldstene, in his official capacity as Executive Director of the California Resources Board ("CARB"); Mary D. Nichols, Daniel Sperling, Ken Yeager, Dorene D'Adamo, Barbara Riordan, John R. Balmes, Lydia H. Kennard, Sandra Berg, Ron Roberts, John G. Telles, and Ronald O. Loveridge, in their official capacities as members of CARB; Arnold Schwarzenegger, in his official capacity as Governor of the State of California, and Edmund G. Brown, Jr., in his official capacity as California Attorney General.

BACKGROUND

Clean Air Act

Over fifty years ago, Congress approved the Clean Air Act "to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population." 42 U.S.C. §7401(b)(1). The Clean Air Act is a comprehensive federal legislation that covers air pollution prevention and control, emissions standards, acid rain reduction, permits, and stratospheric ozone protection. *See generally*, Title 42 of the United States Code, Chapter 85. In the area of emissions standards, Congress has enacted regulations related to motor vehicle emissions and fuel standards, air craft emissions standards, and clean fuel vehicles. Title II of the Clean Air Act.

Section 211 of the Clean Air Act, 42 U.S.C. §7545, sets forth the federal statutory framework for regulating motor vehicle fuels and fuel additives. Section 211 authorizes the United States Environmental Protection Agency ("EPA") to regulate fuels to control vehicle emissions and to ensure a national market for fuels. 42 U.S.C. 7545. Section 211 contains numerous, diverse provisions. Section 211(a) gives the EPA the authority to require registration of any fuel or fuel addition. Section 211(c) allows the EPA to "control or prohibit" any fuel or fuel additive that is found to contribute to air pollution or water pollution. Section 211(g) regulates the use of leaded gasoline. Section 211(k) sets forth a fuels program for the reformulation of gasoline. Section 211(*l*) requires that gasoline contain detergent additives, pursuant to federal specifications, to prevent the accumulation of engine and fuel supply deposits. Section 211(m) requires that, during the winter months, gasoline sold in certain areas have an oxygen content that equals or exceeds 2.7 percent by weight.

The Energy Policy Act of 2005 ("EPAct") modified Section 211 of the Clean Air Act by establishing a national renewable fuel standard program ("RFS"), codified in 42 U.S.C. §7545(o) ("Section 211(o)"). The RFS under EPAct established a renewable fuel volume mandate to require 7.5 billion gallons of renewable fuels to be blended into gasoline by 2010. The Energy Independence and Security Act of 2007 ("EISA") modified the RFS in a number of ways to create the second renewable fuel standard program ("RFS2").

Pursuant to EISA, RFS2 requires the EPA to consider lifecycle GHG emissions and to set lifecycle GHG performance thresholds. EISA defines the term "lifecycle greenhouse gas emissions"

as:

3 4

1

2

5

6

7 8 9

10 11

13

14

12

15 16

17

18 19

20

21 22

23

24

25 26

27

28

the aggregate quantity of greenhouse gas emissions (including direct emissions and significant indirect emissions such as significant emissions from land use changes), as determined by the Administrator, related to the full fuel lifecycle, including all stages of fuel and feedstock production and distribution, from feedstock generation or extraction through the distribution and delivery and use of the finished fuel to the ultimate consumer, where the mass values for all greenhouse gases are adjusted to account for their relative global warming potential.

42 U.S.C. §7545(o)(1)(H). To ensure that each category of renewable fuels emits fewer greenhouse gases than the petroleum fuel it replaces, Section 211(o)(2) requires "that transportation fuel sold or introduced into commerce in the United States...on an annual average basis, contains at least the applicable volume of renewable fuel, advanced biofuel, cellulosic biofuel, and biomass-based diesel" mandated by EISA.

Section 211(o) requires renewable fuel facilities to achieve "at least a 20 percent reduction in lifecycle greenhouse gas emissions compared to baseline lifecycle greenhouse gas emissions." 42 U.S.C. §7545(o)(2)(A)(i). Because the existing renewable fuel infrastructure of United States ethanol would not meet these standards, and to further RFS2's goals to reduce the dependence of the United States on energy imported from volatile regions of the worlds and to stabilize the cost and availability of energy, Section 211(o) exempts certain United States corn ethanol biorefineries from this provision.² Biorefineries that were either in production, or had completed construction, at the time the provision was enacted were not required to comply with EISA's mandate to reduce GHS lifecycle emissions by 20%. Id. Plaintiffs contend that California's LCFS conflicts with this provision by requiring existing biorefineries who are exempt from the federal lifecycle emissions reduction regulation to comply with California's lifecycle emissions reduction standards. In addition, Plaintiffs argue that California's LCFS frustrates the goals of Section 211(o) to provide for independence from foreign fuel and energy security.

Clean Air Act and California

The Clean Air Act "encourage[s] or otherwise promote[s] reasonable Federal, State, and local government actions, consistent with the provisions of this Act, for pollution prevention." 42 U.S.C.

²Ethanol made from corn is a "renewable" fuel when it is produced from sources such as corn and other crops, because those crops can be replanted to produce additional fuel. At present, approximately 98% of United States ethanol is made from corn grown in the United States, called "No. 2 corn." No. 2 corn is also the type of corn used in animal feed, but is not the "sweet" type of corn used for human consumption.

§7401(c). Thus, although the Clean Air Act creates national standards and programs, it "generally seeks to preserve state authority in the area of pollution." *Oxygenated Fuels Assoc., Inc. v. Davis*, 331 F.3d 665, 670 (9th Cir. 2003) ("*Oxygenated Fuels*"). In some areas, federal, state and local governments work together to implement and enforce provisions of the Clean Air Act. For example, the Clear Air Act grants the EPA the authority to set national ambient air quality standards, but allows states to create plans to meet those standards. *Id.* The Clean Act shares jurisdiction with states in some instances because "air pollution prevention...and air pollution control at its source is the primary responsibility of States and local governments." 42 U.S.C. §7401(a)(3). Based on these principles, the Clean Air Act's savings clause provides a "substantial retention of State authority." *Oxygenated Fuels*, 331 F.3d at 671. 42 U.S.C. §7416 provides:

Except as otherwise provided in sections 1857c-10(c), (e), and (f) (as in effect before August 7, 1977), 7543, 7545(c)(4), and 7573 of this title (preempting certain State regulation of moving sources) nothing in this chapter shall preclude or deny the right of any State or political subdivision thereof to adopt or enforce (1) any standard or limitation respecting emissions of air pollutants or (2) any requirement respecting control or abatement of air pollution; except that if an emission standard or limitation is in effect under an applicable implementation plan or under section 7411 or section 7412 of this title, such State or political subdivision may not adopt or enforce any emission standard or limitation which is less stringent than the standard or limitation under such plan or section.

Id. (emphasis added).

As the only state to have adopted emissions standards prior to March 30, 1966, California enjoys special consideration under the Clean Air Act. For example, although Section 209(a) of the Clean Air Act, 42 U.S.C. §7543(a), prohibits states from adopting or enforcing standards related to the control of emissions for new motor vehicles, Section 209(b) allows California to request a waiver from this preemption provision. Similarly, Section 211(c) "explicitly contemplates that California can, in some instances, place restrictions on fuel additives." *Oxygenated Fuels*, 665 F.3d at 671. Section 211(c) (related to offensive fuels and fuel additives) contains the following preemption provision:

Except as otherwise provided in subparagraph (B) or (C), no State (or political subdivision thereof) may prescribe or attempt to enforce, for purposes of motor vehicle emission control, any control or prohibition respecting any characteristic or component of a fuel or fuel additive in a motor vehicle or motor vehicle engine—
(i) if the Administrator has found that no control or prohibition of the characteristic or component of a fuel or fuel additive under paragraph (1) is necessary and has publishing his finding in the Federal Register, or

(ii) if the Administrator has prescribed under paragraph (1) a control or prohibition application to such characteristic or component of a fuel or fuel additive, unless the State prohibition or control is identical to the prohibition or control prescribed by the Administrator.

42 U.S.C. §7545(c)(4)(A). Congress created an express exemption from this preemption for California, as it refers to the Section 209(b) waiver:

Any state for which application of [Section 209(a)] has at any time been waived under [Section 209(b)] may at any time prescribe and enforce, for the purpose of motor vehicle emission control, a control or prohibition respecting any fuel or fuel addition.

42 U.S.C. §7545(c)(4)(B) ("Section 211(c)(4)(B)"). California is the only state that qualifies for the Section 209 waiver or Section 211(c)(4)(A) preemption exemption. *See, Davis v. E.P.A,* 348 F.3d 772, 777 n. 1 (9th Cir. 2003); *Engine Mftrs. Ass'n v. United States*, 88 F.3d 1075, 1079 n. 9 (D.C. Cir. 1996).

California's Global Warming Solutions Act of 2006

California passed the Global Warming Solutions Act of 2006 to address public concern about the potential for man-made climate change or global warming.³ AB 32 has the goal of reducing GHG⁴ emissions in California to 1990 levels by the year 2020. In an effort to attain these goals, CARB is charged to develop and implement regulations in a number of areas.

Earlier this year, CARB approved a set of regulations to govern the marketing of gasoline-ethanol blends sold in California, called the "low carbon fuel standard" regulations. The LCFS focuses on the carbon intensity of all feedstocks and fuel sources used in California. It establishes different standards for gasoline and diesel fuels, and provides for a gradual implementation of the fuel standards for both, with a goal to reduce the carbon intensity of fuel by 10% by the year 2020. The LCFS requires providers to comply with reporting requirements which obligate them to identify for fuels sold or imported into California, the type of fuels, whether the fuel is blended, and the fuel's production process. Providers are required to calculate the "carbon intensity" of each fuel component. Reductions in the average carbon intensity are mandated to begin in 2011, and the amount increases through the

³Counsel for all parties appear to accept as fact that global warming is without debate or dispute.

⁴Justice Stevens explains that the term "greenhouse gases" is used to describe certain gases that when "released into the atmosphere,...act[] like a ceiling of a greenhouse, trapping solar energy and retarding the escape of reflected heat." *Massachusetts v. EPA*, 549 U.S. 497, 505 (2007).

year 2020. Fuel providers may meet carbon intensity standards by blending low-carbon ethanol into gasoline or buying credits generated from another fuel provider that has credits.

Carbon intensity does not measure how much carbon a fuel contains. Rather, carbon intensity is defined as "the amount of lifecycle greenhouse gas emissions, per unit of energy of fuel delivered, expressed in grams of carbon dioxide per megajoule." Cal. Code Regs. Title 17 ("LCFS") Section 95481(a)(11). The California regulation defines "lifecycle greenhouse gas emissions" as the:

aggregate quantity of greenhouse gas emissions (including direct emissions and significant indirect emissions such as significant emissions from land use changes), as determined by the Executive Officer, related to the full fuel lifecycle, including all stages of fuel and feedstock production and distribution, from feedstock generation or extraction through the distribution and delivery and use of the finished fuel to the ultimate consumer, where the mass values for all greenhouse gases are adjusted to account for their relative global warming potential.

LCFS Section 95481(a)(28). The lifecycle analysis "includ[es] all stages of fuel and feedstock production and distribution, from feedstock generation or extraction through the distribution and delivery and use of finished fuel to the ultimate consumer." LCFS Section 95481(a)(28). The direct effects typically include feedstock generation or extraction (agricultural production such as planting and harvesting of plant feedstocks for biofules or extraction for fossil fuels); conversion to finished fuel or fuel blendstock (conversion to ethanol from plants or refining of petroleum); distribution; storage; delivery; and final use of the finished fuel by the end user. In short, carbon intensity is an estimate of emissions related to a fuel's lifecycle that focuses on GHGs emitted when the transportation fuel is extracted, refined, and transported to California.

To accomplish the carbon intensity reduction, the LCFS has assigned carbon intensity scores for fuels, which are embodied in the "Lookup Table" included in LCFS Section 95486 (Appendix A to this opinion).⁵ As applicable to these actions, the Lookup Table assigns a higher carbon intensity score to corn-derived ethanol from the Midwest than it assigns to corn-derived ethanol from California. The Lookup Table assigns the lowest carbon intensity score to sugarcane-derived ethanol from Brazil. The difference in the carbon intensity scores of corn-based ethanol from California, corn-based ethanol

⁵The carbon intensity scores will affect the "credits" used in California's proposed "cap and trade" system. The LCFS establishes an annual limit on carbon intensity applicable to the overall fuel mix of each fuel blender, refiner, and importer, with that limit decreasing each year through 2020. Those whole fuel mix has a carbon intensity below the limit can generate credits that can be traded with those whose fuel mix has a carbon intensity above the limit.

outside of California, and sugarcane-based ethanol from Brazil California's is based on CARB's lifecycle analysis of these fuels.

Ethanol and Carbon Intensity

There are no physical or chemical differences between ethanol made from sugarcane and ethanol made from corn or other sources. Nevertheless, the Lookup Table carbon intensity scores for ethanol vary widely.⁶ A variety of factors account for the these differences.

CARB assigned a carbon intensity value to ethanol made from corn based on its estimate of the "indirect effects" of ethanol produced from corn in the United States. CARB arrived at this estimate using an economic theory called the "indirect land-use change" ("ILUC"). Under the ILUC theory, the production of corn ethanol is assumed to require the dedication of cropland to grown the necessary corn. The use of the cropland to produce corn for ethanol is assumed to require increases in crop acreage for corn and grains otherwise needed for animal nutrition. CARB's ILUC theory further assumes that the process of clearing land to grow more corn and other grains will release GHG emissions into the atmosphere, and that the removal of any trees or other pre-existing vegetation will reduce the "carbon sinks" available to absorb carbon dioxide. All corn ethanol listed in the Lookup Table is assigned an "indirect emissions" carbon penalty of 30 grams of carbon dioxide-equivalent emissions per megajoule of energy.

The LCFS regulation assigns different carbon intensity scores to more than a dozen corn ethanol "pathways" in what are the direct effects of GHG emissions. Numerous distinctions are drawn among different categories of corn ethanol producers. Significant to this litigation, the Lookup Table assigns different carbon intensity scores to "California" and "Midwest" corn pathways. This distinction is based on what CARB presents as inherently lower GHG emissions between California and Midwest ethanol based on transportation (CARB notes that California corn ethanol does not have to travel as far to reach the end-user in California). CARB further assumes that California corn ethanol producers have better access to electricity produced from hydropower and nuclear power plants than Midwestern corn ethanol

⁶According to the EPA lifecycle analysis, sugarcane ethanol made in Brazil will reduce GHG emissions by approximately 61% when compared to traditional gasoline, while corn ethanol made in the United States will reduce emissions by approximately 21%. 75 Fed. Reg. 14,786. Because of its low carbon intensity score, the EPA designates sugarcane ethanol as an "advanced biofuel" whereas ethanol from corn is a "renewable fuel."

producers, and California producers will be at least as efficient as Midwestern producers in the use of electricity. Plaintiffs question these assumptions.

In addition to the "California" and "Midwest" distinction of corn ethanol, the Lookup Table provides for other distinctions, as well. For example, the Lookup Table distinguishes between corn ethanol producers based on whether they use natural gas, coal, or renewable "biomass" fuels to power the ethanol plant for conversion of corn to ethanol. CARB further accounts for whether the corn ethanol plant produces "wet mill" or "dry mill." Mill refers to a by-product of the conversion process, called "distillers grains." Distillers grains are sold in a separate market as an animal nutrient, and can be sole either wet or dry. CARB assigns a higher GHG level to corn ethanol plants that produce dry will, because CARB assumes that the heat used to dry the distillers grain requires additional energy.

The United States' chief rival in the global ethanol industry is Brazil, which manufactures ethanol from sugarcane. CARB and the EPA assign ethanol from sugarcane the lowest carbon intensity score for a variety of reasons. First, the tailpipe emissions from combustion of sugarcane ethanol is considered to be zero, because the carbon dioxide released from combustion is estimated to offset by the absorption of carbon dioxide from the feedstock. Second, the energy consumed and GHGs resulting from planting and growing sugarcane (machinery, fertilizer, etc.) is lower than for other crops, because sugarcane is harvested by cutting off the stalks without destroying the root system. Sugarcane is replanted every five to seven years, whereas corn is replanted every year. Third, harvesting practices have allowed for the export of electricity from sugarcane ethanol plants in Brazil using energy from burning the crop residue (leaves and stalks). CARB's ILUC analysis assigns an "indirect emissions" carbon penalty of 46 grams of carbon dioxide-equivalent emissions per megajoule of energy to sugarcane ethanol from Brazil. Indirect effects include deforestation of the Amazon rainforest.

Plaintiffs' allegations

In *Rocky Mountain*, 09cv2234, plaintiffs allege that California's LCFS is designed to benefit instate interests to the detriment of out-of-state ethanol producers, while producing no local environmental benefits. Plaintiffs contend that the LCFS will close California's borders to traditional corn ethanol produced in the Midwest, and regulate improperly extraterritorial conduct that has no effect on the corn ethanol brought into the state, thereby balkanizing the domestic transportation fuel market and,

ultimately, crushing the corn ethanol industry. Plaintiffs conclude that these actions and their consequences would frustrate Congress' clear objectives in adopting EISA, which fosters United States independence on foreign sources of fuel and strengthens national security, and would violate the Commerce Clause.

In *National Petrochemical*, 10cv163, plaintiffs argue that the LCFS violates the Commerce Clause on three grounds: (1) the LCFS discriminates, both on its face and as applied, against fuels produced in other states and other countries; (2) the LCFS regulates interstate and foreign commerce; and (3) the LCFS imposes substantial burdens on interstate and foreign commerce that are clearly excessive when measured against the purported local benefits. In addition, plaintiffs argue that the LCFS conflicts with, and presents an obstacle to the accomplishment of Congress' goals in, Section 211(o).

Plaintiffs seek declaratory judgment that the LCFS violates federal law, and also seek njunctive relief to enjoin defendants from implementing or enforcing the LCFS.

PARTIES

Rocky Mountain et al, v. Goldstene, 09cv2234

The plaintiffs in *Rocky Mountain* represent groups that have an interest in protecting the corn ethanol industry. Plaintiffs are corn growers (California and out-of-state farmers), users, merchants and marketers of distillers grain (a by-product created during the corn-to-ethanol process that is fed to cows), producers of corn ethanol, and importers of ethanol into California from other states.

"Farmer Plaintiffs"

Rocky Mountain Farmers Union is a cooperative association representing family farmers and ranchers in Wyoming, Colorado, and New Mexico. Its members include farmers who grow No. 2 corn for use in producing ethanol nationwide.

Redwood County Minnesota Corn and Soybean Growers is a not-for-profit corporation whose members, located in Redwood County, Minnesota, include farmers who grow No. 2 corn for use in producing ethanol nationwide.

Penny Newman Grain, Inc. ("Penny Newman") is a leading merchant in the market for grains and feed by-products in the southern San Joaquin Valley and worldwide. Penny Newman is

headquartered in Fresno, California and has other offices in California and Tennessee and commodities handling and storage facilities in Hanford and Bakersfield.

Rex Nederend is a farmer and rancher who owns a dairy near Tipton, California and ranches near Wasco and Lemoore, California. He purchases and uses distillers' grains at his dairy and he grows No. 2 corn that, when market conditions permit him to do so, he would attempt to sell to biorefineries for use in producing ethanol.

Fresno County Farm Bureau ("Farm Bureau") is a non-profit membership organization that advocates for farmers and farming interests in Fresno County. Its members include corn growers who, when market conditions permit them to do so, would attempt to sell to biorefineries for use in producing ethanol. Farm Bureau's members also include dairies that purchase and use distillers grains.

Nisei Farmers League ("Nisei") is an organization committed to serving the needs of California agriculture. With over 1000 members, the organization is headquartered in Fresno, California. Nisei members include corn growers located in Modesto and Tulare who, when conditions permit them to do so, would attempt to sell to biorefineries for use in producing ethanol. Nisei's members also include dairies in Kings, Tulare, and Fresno counties that purchase and use distillers' grains.

California Dairy Campaign ("CDC") represents the views and interests of California Dairy Farmers. Headquartered in Turlock, CDC has approximately 300 members. Its members include dairy farms located in Madera, Kings, Fresno, Tulare, and Kern Counties that purchase and use distillers grains. Because the milk price is heavily regulated, CDC members are sensitive to the prices of commodities. CDC members are concerned that the LCFS and its impact on gasoline prices will increase the costs of their inputs.

Rocky Mountain Farmers Union, Minnesota Growers Association, Mr. Nederend, Nisei, Farm Bureau, and CDC are collectively referred to as the "farmer plaintiffs."

Corn Ethanol Industry Plaintiffs

Growth Energy in a non-profit corporation committed to the promise of agriculture and growing America's economy through cleaner, greener energy. Formed in 2009, Growth Energy and its members include firms that produce ethanol in motor fuels sold in Fresno County and other partes of the state as well as companies who provide equipment and technology used to produce ethanol from corn.

Renewable Fuels Association is a trade association whose members include a broad cross-section of businesses, individuals, and organizations dedicated to the expansion of the fuel ethanol industry in the United States. Its members include producers of ethanol for use in motor vehicle fuels sold in Fresno County and other parts of California; importers of ethanol into California from other states; growers of corn for use in the production of ethanol; and marketers of distillers grains and other feed co-products in California.

Defendant

James N. Goldstene, in his official capacity as Executive Director of CARB.

National Petrochemical & Refiners Association, et al. v. Goldstene, 10cv163

The plaintiffs in National Petrochemical represent United States petrochemical refiners and manufacturers, the American trucking industry, and organizations who promote energy security and the development of non-conventional fuels domestically. The United States petrochemical refiners and manufacturers are interested to protect the current infrastructure and processes for gasoline production in the United States. The trucking industry is interested in continuing and maintaining the interstate transport of fuels, including corn ethanol, into California. The energy security plaintiffs are interested in protecting, encouraging, and developing the domestic production of energy.

Petrochemical Refiners and Manufacturers Plaintiff

National Petrochemical & Refiners Association ("NPRA") is a trade association of more than 450 companies. NPRA members include virtually all United States refiners and petrochemical manufacturers. NPRA members supply consumers nationwide with a wide variety of products, including gasoline, diesel fuel, and the chemicals that service as "building blocks" in making diverse products such as plastics, clothing, medicine, and computers. Its members own and brand multiple transportation fuel outlets in the Fresno area.

Trucking Industry Plaintiff

American Trucking Associations ("ATA") is a federation of motor carriers, state trucking associations, and national trucking conferences created to promote and protect the interest of the trucking industry. ATA encompasses over 30,000 companies and every type and class of motor carrier operation.

"Energy Security" Plaintiffs

Center for North American Energy Security is a limited liability company organized for the purpose of promoting North American energy security through the responsible development of oil sands, oil shale, and similar so-called "non-conventional" energy resources in North America. CNAES includes members who have a financial interest in such non-conventional resources and/or technologies for developing those resources.

Consumer Energy Alliance in a nonprofit, nonpartisan organization with more than 125 affiliated organizations and tens of thousands of individual grassroots members that support the thoughtful utilization of energy resources to help ensure improved domestic and global energy security and stable prices for consumers. CEA seeks to improve consumer understanding of the nation's energy security, including the need to properly balance our energy needs with environmental and conservation goals and continue efforts to diversify our energy resources.

Defendants

James Goldstene, in his official capacity as the Executive Officer of CARB. Mary D. Nichols, Daniel Sperling, Ken Yeager, Dorene D'Adamo, Barbara Riordan, John R. Balmes, Lydia H. Kennard, Sandra Berg, Ron Roberts, John G. Telles, and Ronald O. Loveridge, in their official capacities as members of CARB. The Governor of the State of California, Arnold Schwarzenegger. The Attorney General of the State of California, Edmund G. Brown, Jr.

Intervenor Defendants

Natural Resources Defense Council, Inc. ("NRDC"), Sierra Club, and Conservation Law Foundation are intervenor defendants in both cases. All of the intervenor defendants have spent time, money, and energy to promote the passage of AB 32, believing that it will reduce GHGs and reduce the man-made effects of global warming. These organizations are interested to protect the environment and their investment. NRDC and Conversation Law Foundation are represented by David Pettit. Sierra Club is represented by Pat Gallagher.

NRDC is a national non-profit organization. One of NRCD's organizational purposes is to protect the environment and public health. NRCD "spearheaded the effort to pass AB 32 and enact the Global Warming Solutions Act of 2006. NCRD participated in the California LCFS rulemaking process,

prepared technical analyses responsive to agency proposals, provided written and oral comments at hearings and workshop, and engaged in direct discussions with CARB staff and personnel. NRDC has a strong and long-standing interest in supporting the LCFS as a means to represent and protect the interest of its members and program interest, and as such, has an interest in the success of the defendant.

Sierra Club is a national organization with a purpose to explore, enjoy, and protect the wild places of the Earth, to practice and promote the responsible use of the Earth's ecosystems and resources, and to educate and enlist humanity to protect and restore the quality of the natural and human environments. Sierra Club's top national priority is its Global Warming and Energy Campaign, which seeks to promote solutions to global warming using current and cutting-edge technologies. Implementing California's LCFS was one of the components of this campaign. In addition to its efforts in California, the Sierra Club is working with eleven northeastern states to assist in the development of a regional LCFS that is based on the California LCFS. Those efforts will be severely hampered if the California LCFS program is enjoined. In sum, Sierra Club has a very strong interest, as part of its overall national campaign aimed at promoting solutions to global warming, to ensure that the California LCFS regulations are upheld in this case.

Conservation Law Foundation is a New England environmental advocacy organization that works to solve environmental problems that threaten people, natural resources, and communities of New England. CLF took a key role in the formulation, adoption and implementation of the Regional Greenhouse Gas Initiative ("RGGI"), a cooperative effort by ten New England and mid-Atlantic states designed to limit greenhouse gas emissions. RGGI was the first mandatory market-based CO2 emissions reduction program in the United States. CLF has now taken a lead role in advancing the Northeast/Mid-Atlantic regional LCFS, modeled in large part after the California LCFS at issue in this case. CLF staff testified before CARB, and the Northeast/Mid-Atlantic LCFS initiative was identified by CARB officials as one of the important considerations that supported adoption of a useful California program. On December 29, 2009, the governors of the ten RGGI states and Pennsylvania signed a Memorandum of Understanding in which the states committed to develop a policy framework for a regional LCFS, followed by a model rule, based on California's LCFS.

28 ///

Amici Curiae

State of Oregon

The State of Oregon is undertaking a variety of strategies to reduce GHG emissions that cause climate change, including development and adoption of an Oregon LCFS. Plaintiffs' challenge is of particular concern to Oregon because, if accepted by this Court and followed by other courts, it has the potential to affect the State of Oregon's ongoing efforts to protect the health, safety, and welfare of its citizens through the adoption of an Oregon LCFS. Oregon argues that preemption is not an issue because Congress preserved California's authority to regulate "any fuel" through a special exemption from the preemption provision of the federal Clean Air Act. Whether the Clean Air Act exempts from preemption any state other than California is not an issue in this case. The State of Oregon therefore asks this Court not to decide inadvertently the preemption issue with respect to other states.

Brazilian Sugar Cane Industry Association ("UNICA")

UNICA is the leading trade association for the sugarcane industry in Brazil, representing nearly two-thirds of all sugarcane production and processing in that county. UNICA's members represent the top producers of sugar, ethanol, renewable electricity and other sugarcane co-products in Brazil. UNICA's members exported to the United States approximately 600 million gallons of sugarcane-based ethanol in 2008 for use as transportation fuel. California's LCFS rules recognize ethanol made from sugarcane to have extremely low carbon intensity, generating lower life-cycle carbon emissions than ethanol made from other biofuels, including corn. California's LCFS strongly encourages California's fuel distributors to use sugarcane-based ethanol in California. As a result, UNICA's members share California's interest in the success of the LCFS. A decision on California's LCFS will have a significant impact on UNICA's members. In addition, UNICA raises issues of international trade law and policy.

Oregon Petroleum Association

Oregon Petroleum Association ("OPA") is an Oregon association of fuel distributors, retailers, commercial fueling and heating oil markets. OPA is concerned that a higher carbon intensity number given to a fuel source produced outside of the State of Oregon would lead to much higher prices for fuel sources produced within the state. OPA takes no position on whether the California Low Carbon Fuel Standard violates the Commerce Clause or whether it is preempted by federal law. OPA surmises,

however, that if Oregon adopts an LCFS, the issues decided in this litigation would very likely appear in litigation challenging an Oregon LCFS. Thus, OPA submits an amicus brief "in response to mistaken assertions in the State of Oregon's Amicus Brief." Specifically, OPA is concerned with Oregon's argument that 49 other states can follow California's lead without regard to the limitations of the Commerce Clause and federal preemption under the Clean Air Act.

STANDARD OF REVIEW

A motion to dismiss pursuant to Fed R. Civ. P. 12(b)(6) is a challenge to the sufficiency of the pleadings set forth in the complaint. A Fed. R. Civ. P. 12(b)(6) dismissal is proper where there is either a "lack of a cognizable legal theory" or "the absence of sufficient facts alleged under a cognizable legal theory." *Balisteri v. Pacifica Police Dept.*, 901 F.2d 696, 699 (9th Cir. 1990). In considering a motion to dismiss for failure to state a claim, the court generally accepts as true the allegations of the complaint, construes the pleading in the light most favorable to the party opposing the motion, and resolves all doubts in the pleader's favor. *Lazy Y. Ranch LTD v. Behrens*, 546 F.3d 580, 588 (9th Cir. 2008).

To survive a motion to dismiss, the plaintiff must allege "enough facts to state a claim to relief that is plausible on its face." *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 127 S. Ct. 1955, 1974 (2007). "A claim has facial plausibility when the plaintiff pleads factual content that allows the court to draw the reasonable inference that the defendant is liable for the misconduct alleged." *Ashcroft v. Iqbal*, 129 S. Ct. 1937, 1949 (2009). "The plausibility standard is not akin to a 'probability requirement,' but it asks for more than a sheer possibility that a defendant has acted unlawfully." *Id.* (quoting *Twombly*, 550 U.S. at 556). "Where a complaint pleads facts that are 'merely consistent with' a defendant's liability, it 'stops short of the line between possibility and plausibility for entitlement to relief." *Id.* (quoting *Twombly*, 550 U.S. at 557). A court is "free to ignore legal conclusions, unsupported conclusions, unwarranted inferences and sweeping legal conclusions cast in the form of factual allegations." *Farm Credit Services v. American State Bank*, 339 F.3d 765, 767 (8th Cir.2003) (citation omitted). "[F]or a complaint to survive a motion to dismiss, the non-conclusory 'factual content,' and reasonable inferences from that content, must be plausibly suggestive of a claim entitling the plaintiff to relief." *Moss v. U.S. Secret Service*, 572 F.2d 962, 969 (9th Cir.2009).

28 ///

Judicial Notice

Both plaintiffs and defendants have submitted requests for judicial notice in support of their briefing in both motions to dismiss. Pursuant to Fed. R. Civ. P. 12(b)(6) standards, a court may look only at the face of the complaint and documents attached to or referenced in the complaint to decide a motion to dismiss. *Van Buskirk v. Cable News Network, Inc.*, 284 F.3d 977, 980 (9th Cir.2002). Certain materials extrinsic to the complaint may be considered, however, but only if they are properly subject to judicial notice. *See Mack v. South Bay Beer Distributors, Inc.*, 798 F.2d 1279, 1282 (9th Cir.1986). To be judicially noticed, a fact must not be subject to a reasonable dispute because it must be either generally known within the territorial jurisdiction of the court or "capable of accurate and ready determination by sources whose accuracy cannot reasonably be questioned." Fed.R.Evid. 201.

"Judicial notice" is the court's recognition of the existence of a fact without the necessity of formal proof. *See United States v. Harrison*, 651 F.2d 353, 355 (5th Cir.1981); *Castillo Villagra v. I.N.S.*, 972 F.2d 1017, 1026 (9th Cir.1992). Facts proper for judicial notice are those facts not subject to reasonable dispute and either "generally known" in the community, or "capable of accurate and ready determination" by reference to sources whose accuracy cannot be reasonably questioned. Fed.R.Evid. 201; *MGIC Indem. Corp. v. Weisman*, 803 F.2d 500, 504 (9th Cir.1986) (court may take judicial notice of official records and reports. The court need not accept as true allegations that contradict facts which may be judicially noticed by the court.). Courts may take judicial notice of public records. *Cachil Dehe Band of Wintun Indians of Colusa Indian Community v. State of Calif.*, 536 F.3d 1034, 1039-1040 & fn. 4 (9th Cir.2008).

In both actions, defendants seek judicial notice of the following documents:

- 1. Notice of Approval of Regulatory Action dated January 12, 2010
- 2. Air Resources Board Resolution 09-31
- 3. State of California Governor Executive Order S-01-07 dated January 18, 2007
- 4. House Debate Conference Report, 1970 Legislative History
- 5. Section 213 of the Clean Air Act Amendments of 1990, Pub. L. No. 101-549
- 6. Legislative History of the Clean Air Act Amendments of 1990
- 7. "EPA Finalizes Regulations of the National Renewable Fuel Standard Program for 2010

1		and Beyond," Office of Transportation and Air Quality, EPA-420-F-10-007, Feb. 2010
2	8.	Low Carbon Fuel Standard Final Regulation Order
3	9.	1999 Initial Statement of Reasons for MTBE
4	10.	2000 Amendments to Initial Statement of Reasons
5	11.	December 9, 1999 Resolution 99-39
6	12.	June 14, 2007 Resolution 07-21
7	13.	2007 Amendments to Initial Statement of Reasons
8	14.	December 29, 1969 Report to the Assembly on Recommended Standards for the
9		Composition of Gasoline
10	15.	April 23, 2009 Resolution 09-31
11	16.	December 2009 Final Statement of Reasons
12	17.	Legislative History of the Clean Air Amendments of 1970
13	The Rocky M	ountain plaintiffs seek judicial notice of the following documents:
14	1.	Proposed Regulation to Implement the Low Carbon Fuel Standard-Volume I, Staff
15		Report: Initial Statement of Reasons.
16	2.	Proposed Regulation to Implement the Low Carbon Fuel Standard-Volume II,
17		Appendices.
18	3.	California's Low Carbon Fuel Standard-Final Statement of Reasons.
19	4.	Letter from Barack Obama to the Hons. John Hoeven and Chet Culver of the Governor's
20		Biofuels Coalition dated May 27, 2009
21	5.	Collection and analysis of date on energy markets in the United States ans a report on
22		filings under Chapter 11 of the United States Bankruptcy Code, prepared and released
23		by the Energy Information Administrative of the United States Department of Energy
24		on November 18, 2009
25	6.	Report prepared by Sierra Research, Inc. and submitted to CARB in the rulemaking and
26		found in the rulemaking file maintained by CARB pursuant to Cal. Gov. Code 11347.3
27	7.	Excerpts from Congressional Debate on the 1970 Clean Air Act Amendments
28	8.	Excerpt from testimony at a hearing on the Subcommittee on Energy at the Environment

As set forth above, the Court takes judicial notice of public records not subject to reasonable dispute, and documents attached to or relied upon in the complaint. Accordingly, the Court grants the parties' requests for judicial notice of the statutes, and those documents specifically quoted in the complaints. The Court may also take judicial notice of the legislative histories of the statutes. *See Louis v. McCormick & Schmick Restaurant Corp.*, 460 F. Supp. 2d 1153 (C.D. Cal. 2006). To the extent that the legislative histories conflict, or represent the statements of individual legislators, this Court will consider the weight to give to the statements and resolve all doubts in favor of plaintiffs pursuant to motion to dismiss standards. That is, while this Court may take judicial notice of the legislative histories, the statements contained therein may be subject to dispute.

Moreover, the Court finds that many of the documents are not judicially-noticeable. Documents presented by the parties purport to establish as fact those facts that are directly in dispute in this action. This Court will not consider those documents. To consider these documents would convert these Fed. R. Civ. P. 12(b)(6) motions to Fed. R. Civ. P. 56 motions. No party has requested summary judgment at this early stage of these proceedings. Accordingly, this Court will not consider these documents in this motion.

DISCUSSION

PREEMPTION

A. Standards

Under the U.S. Constitution's Supremacy Clause, the U.S. Constitution and federal laws "shall be the supreme Law of the Land . . . any Thing in the Constitution or Laws of any State to the Contrary notwithstanding." U.S. Const. Art. VI, cl. 2. "Congress has the authority, when acting pursuant to its enumerated powers, to preempt state and local law." *Oxygenated Fuels*, 331 F.3d at 667. Three types of preemption are recognized: (1) express ("Congress can define explicitly the extent to which its enactments pre-empt state law"); (2) field ("state law is pre-empted where it regulates conduct in a field that Congress intended the Federal Government to occupy exclusively"); or (3) conflict ("state law is pre-empted to the extent that it actually conflicts with federal law"). *English v. General Elec. Co.*, 496 U.S. 72, 78-79, 110 S.Ct. 2270 (1990); *Oxygenated Fuels*, 331 F.3d at 667. Plaintiffs allege conflict preemption. Specifically, plaintiffs allege that California's LCFS is preempted to the extent that it

conflicts with Section 211(o), as adopted by EISA in 2007.

"Congressional purpose is the 'ultimate touchstone' of preemption analysis." *Lorillard Tobacco Co. v. Reilly*, 533 U.S. 525, 541 (2001). "As a result, any understanding of the scope of a pre-emption statute must rest primarily on 'a fair understanding of congressional purpose." *Medtronic, Inc. v. Lohr,* 518 U.S. 470, 485-486, 116 S.Ct. 2240 (1996). "Evidence of pre-emptive purpose is sought in the text and structure of the statute at issue. If the statute contains an express pre-emption clause, the task of statutory construction must in the first instance focus on the plain wording of the clause, which necessarily contains the best evidence of Congress' pre-emptive intent." *CSX Trans., Inc. v. GTE Sylvania, Inc.*, 447 U.S. 102, 108, 113 S.Ct. 1732 (1993). "Statutory construction must begin with the language employed by Congress and the assumption that the ordinary meaning of that language accurately expresses the legislative purpose." *Park 'N Fly, Inc. v. Dollar Park & Fly, Inc.*, 469 U.S. 189, 194, 105 S.Ct. 658, 83 L.Ed.2d 582 (1985). Nonetheless, "[p]reemption provisions are narrowly and strictly construed." *Montalvo v. Spirit Airlines*, 508 F.3d 464, 474 (9th Cir. 2007).

Even where a federal statute preempts an entire field of regulation, "every state statute that has some indirect effect [on that field] . . . is not pre-empted." *Schneidewind v. ANR Pipeline Co.*, 485 U.S. 293, 308, 108 S.Ct. 1145, 1155 (1988). "Tension between federal and state law is not enough to establish conflict preemption." *Incalza v. Fendi North America, Inc.*, 479 F.3d 1005, 1010 (9th Cir. 2007). A court finds preemption only in "those situations where conflicts will necessarily arise." *Goldstein v. California*, 412 U.S. 546, 554, 93 S.Ct. 2303 (1973). A "hypothetical conflict is not a sufficient basis for preemption." *Total TV v. Palmer Communications, Inc.*, 69 F.3d 298, 304 (9th Cir. 1995).

B. Whether ordinary preemption principles apply

Defendants assert that preemption principles do not apply in this action for two reasons. First, defendants argue that because this action involves an alleged conflict between two federal statutes or statutory provisions, the Supremacy Clause is not implicated. Second, defendants argue that Section 211(o) of the Clean Air Act, under EISA, cannot preempt California's LCFS regulation because "conflict preemption principles do not apply" where a statute has express preemption provisions and savings clauses. For the following reasons, this Court rejects both of these arguments.

Defendants' first argument is an attempt to reframe the issue presented by plaintiffs. In their complaints, plaintiffs clearly allege that California's LCFS conflicts with Section 211(o) of the Clean Air Act. In their motion to dismiss, defendants contend that "plaintiffs' claim actually involves two provisions within section 211 of the Clean Air Act"; namely, Section 211(c)(4)(B) and Section 211(o). Defendants make this statement after acknowledging the "remarkable omission of any reference to section 211(c)(4)(B) in plaintiffs' complaint." Defendants' position ignores impermissibly the allegations of plaintiffs' complaints and erroneously implies that plaintiffs challenge Section 211(c)(4)(B).

Moreover, defendants' argument relies on its position that Section 211(c)(4)(B) grants California "broad authority" and "substantial latitude" to prescribe any control respecting any fuel so long as it targets motor vehicle emissions. As described more fully below, however, "the sole purpose of [Section 211](c)(4)(B) is to waive for California the express preemption provision found in [Section 211](c)(4)(A)." *Davis*, 348 F.3d at 786. This Court agrees with plaintiffs that the preemption exemption of Section 211(c)(4)(B) does not transform a California regulation into federal law for Supremacy Clause purposes and "does not bar the ordinary working of conflict pre-emption principles." *Geier*, 529 U.S. at 869.

Similarly, defendants' second argument is without merit, and is a misrepresentation of well-settled law. Defendants contend that ordinary conflict preemptions do not apply when a federal statute contains an express preemption provision. To support their position, defendants rely on *Freightliner Corp. v. Myrick*, 514 U.S. 280, 288 (1995), and quote the following passage: "When Congress has considered the issue of pre-emption and has included in the enacted legislation a provision explicitly addressing that issue...there is no need to infer congressional intent to pre-empt state laws from the substantive provisions of the legislation." This passage from *Freightliner* is a quotation from *Cipollone v. Liggett Group, Inc.*, 505 U.S. 504 (1992), used in *Freightliner* to explain where the source of the *mistaken impression* that an express preemption provision foreclosed conflict preemption principles. In isolating this quote, defendants ignore that the *Freightliner* Court went on to distinguish and limit *Cipollone*: "Our subsequent decisions have not read *Cipollone* to obviate the need for analysis of an individual statute's pre-emptive effects." 514 U.S. at 289. In fact, the *Freightliner* court rejected

1 | d 2 | v 3 | 3 4 | d 5 | c

defendants' argument advanced here as "without merit." *Id.* And, in a series of more recent cases, *Geier v. American Honda Motor Co.*, 529 U.S. 861 (2000), *Buckman Co. v. Plaintiffs' Legal Comm.*, 531 U.S. 341 (2001), and *Sprietsma v. Mercury Marine*, 537 U.S. 51, 65 (2002), the Court has clarified that ordinary conflict preemption principles do apply despite other express preemption provisions or savings clauses. In *Spreitsma*, the Court held:

Congress' inclusion of an express pre-emption clause does not bar the ordinary working of conflict pre-emption principles that find implied pre-emption where it is impossible for a private party to comply with both state and federal requirements, or where state law stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress.

537 U.S. at 65 (internal quotations and citations omitted). Here, plaintiffs argue that the LCFS stands as an obstacle to the accomplishment of the purposes and objectives of Section 211(o). According, this Court shall apply ordinary conflict preemption principles notwithstanding the savings clause and express preemption clause of the Clean Air Act.

C. Scope and Purpose Section 211(c)(4)(B)

Defendants argue that because Section 211(c)(4)(B) explicitly authorizes California to enact regulations related to fuels, and because the LCFS is a fuels regulation targeting the lifecycle of carbon emissions related to motor vehicle fuels, California is neither preempted nor subject to the Commerce Clause. As set forth above, Section 211(c)(4)(b) provides:

Any State for which application of section [209](a) of this title has at any time been waived under section [209](b) of this title may at any time prescribe and enforce, for the purpose of motor vehicle emission control, a control or prohibition respecting any fuel or fuel additive.

42 U.S.C. §7545(c)(4)(B). Defendants contend that Section 211(c)(4)(B) gives California broad authority to regulate fuels, and preserves California's pre-existing exercise of its state police power to regulate any aspect of motor vehicle fuel for emissions control purposes. CARB maintains that the LCFS satisfies this provision, and is therefore not subject to preemption.

Defendants argue repeatedly that the breadth of California's authority pursuant to Section 211(c)(4)(B) is unrestricted, and that this section gives California substantial latitude and broad authority to regulate fuels. Defendants assert that Section 211(c)(4)(B) is unlimited by the restrictive language of Section 211(c)(4)(A), which reads:

25

26

27

28

Except as otherwise provided in subparagraph (B) or (C), no State (or political subdivision thereof) may prescribe or attempt to enforce, for purposes of motor vehicle emission control, any control or prohibition respecting any characteristic or component of a fuel or fuel additive in a motor vehicle or motor vehicle engine-(i) if the Administrator has found that no control or prohibition of the characteristic or component of a fuel or fuel additive under paragraph (1) is necessary and has publishing his finding in the Federal Register, or

(ii) if the Administrator has prescribed under paragraph (1) a control or prohibition application to such characteristic or component of a fuel or fuel additive, unless the State prohibition or control is identical to the prohibition or control prescribed by the

Administrator.

42 U.S.C. §7545(c)(4)(A). Defendants point out that the limited scope of Section 211(c)(4)(A), which limits a preemption to a "characteristic or component of a fuel or fuel additive," was added to this Section in the 1990 Amendments to the Clean Air Act. See H.R. Rep. No. 101-490, at 314(1990) ("the revision clarifies that a Federal fuel or fuel additive regulation only preempts a nonidentical State regulation governing the same component or characteristic of the fuel or fuel additive."). Defendants maintain that in adding this restriction, Congress intended to limit further the federal preemption of state fuel regulations, but did not intend to restrict in any way California's authority to regulate fuels. Based on these premises, defendants conclude that Section 211(c)(4)(B) provides California broad authority to regulate fuels, unrestricted by the language of Section 211(c)(4)(A).

Having considered the applicable statutes and relevant case law, this Court finds that Section 211(c)(4)(B) does not grant California unfettered authority to regulate fuels, as defendants suggest. Section 211(c)(4)(B) grants California an exemption from federal preemption in the area of fuel components and fuel additives regulation, notwithstanding defendants' repeated assertions, that preemption provision—and its exception—are limited in scope.

In Davis, the Ninth Circuit rejected California's argument that Section 211(c)(4)(B) authorized California to disregard compliance with the requirements of different section of the Clean Air Act, Section 211(k), and held:

The structure of [211(c)(4)] makes it clear that the sole purpose of [211(c)(4)(B)] is to waive for California the express preemption provision found in [211(c)(4)(A)]. It was not intended to allow California, at its sole discretion, to relieve refiners of their obligations to comply with federal fuel requirements such as the RFG program under [211(k)(2)(B)].

348 F.3d at 786. Similarly, Section 211(c)(4)(B) does not allow California, in its sole discretion, to

frustrate the purposes and objectives of Section 211(o). As plaintiffs allege, and pursuant to the statute, Section 211(o) establishes a renewable fuels standard program that considers lifecycle emissions of fuels, including ethanol. Section 211(c)(4)(B) does not grant California affirmative authority either to conflict with the provisions of Section 211(o) or to ignore them altogether. Accordingly, California's LCFS is subject to preemption.

Moreover, based on *Oxygenated Fuels*, and the plain language of the statutes when read together, the scope of California's preemption exemption is limited. First, California has "substantial latitude in regulating, and choosing among, *fuel additives* under the (c)(4)(B) exemption." *Id.* at 669 (emphasis added). Second, California's regulation of fuel additives and components must be "for the purpose of motor vehicle emission control." *Id.*; *see also, Davis*, 348 F.3d at 777. This conclusion is supported by the well-settled principle that "[p]reemption provisions are narrowly and strictly construed." *Montalvo*, 508 F.3d at 474.

To support their position that the Section 211(c)(4)(B) provides broader authority than Section 211(c)(4)(A), defendants rely on *Oxygenated Fuels*, 331 F.3d at 670. In *Oxygenated Fuels*, however, the Ninth Circuit made clear that Section 211(c)(4)(A) and Section (c)(4)(B) must be read together, and that the "two provisions are precisely coextensive." *Id.* The court reasoned:

The language of the Section 211(c)(4)(A) express preemption provision parallels the language of the (c)(4)(B) exemption. Under the (c)(4)(A) preemption provisions, other states may not enforce a fuel control provision *for the purpose of emission control*, but under the (c)(4)(B) exemption, California may. See 42 U.S.C. §7545(c)(4)(A)-(B)." (emphasis in original).

Oxygenated Fuels, 331 F.3d at 670. Thus, the restrictive language of Section (c)(4)(A) applies to the Section 211(c)(4)(B) preemption exemption. To fit within the preemption exemption, then, LCFS must both regulate a component of a fuel or a fuel additive and be for the purpose of motor vehicle emissions control.

Defendants attempts to distinguish *Davis* are unpersuasive, and their limited reading of *Oxygenated Fuels* is unsupported and unsupportable. As set forth above, defendants rely on *Oxygenated Fuels* to argue that they have "substantial latitude" and "broad authority" to regulate fuels, but ignore the language in the very same case that unambiguously limits that exemption to the preemption provision. For example, defendants point out that in *Oxygenated Fuels*, the Court found that the Clean

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

Air Act "explicitly contemplates that California can, in some instances, place restrictions on fuel additives" *Id.* at 670-71. Defendants then interject a parenthetical that "by extension" California may regulate "fuels themselves." This extension is unsupported by the case or the plain language of Section 211(c)(4)(A), which limits the preemption and its exemption to components of fuels and fuel additives and for the purpose of motor vehicle emissions. To distinguish *Davis*, among other arguments, defendants argue that *Davis*' ruling that the "sole purpose of Section 211(c)(4)(B)" is to waive the preemption exemption is "not essential to the court's decision" and is "almost in the category of dicta." As plaintiffs correctly point out, "Defendants' novel characterization cannot hide that the formal term for 'almost dicta' is the holding of the Ninth Circuit on a controlling issue of law."

In addition, defendants concede that Sections 211(o) and 211(c)(4)(B) relate to different subjects, and that both provisions can and should be given effect. "[W]hen two statutes are capable of coexistence, it is the duty of the courts...to regard each as effective." Radzanower v. Touche Ross & Co., 426 U.S. 148, 155 (1976). Indeed, defendants urge the Court in this motion to give both provisions full effect. In reading through the statutory context as a whole, Section 211 contains several subsections that address many aspects of motor vehicle fuels. Federal preemption, and California's exceptions, differ under each section. Thus, while California has an exemption from preemption of motor vehicle fuel components and additives under Section 211(c), California was required to request a waiver from the federal oxygen fuel requirements under Section 211(k). In Davis, the Court rejected California's position that Section 211(c)(4)(B) granted California authority broader than Section 211(c)(4)(A), and ruled that Section 211(c)(4)(B) does not allow California to ignore other provisions of Section 211(k). Viewing Section 211 as a whole, this Court finds that although California is exempt from the preemption of Section 211(c), that exemption preemption does not allow California to disregard the RFS2 as set forth in Section 211(o). This conclusion recognizes that Section 211(c) and Section 211(o) regulate different aspects of fuels, and gives full effect to each of Section 211's provisions. Accordingly, while Section 211(o) contains no express preemption provision, Section 211(o) may preempt California's LCFS under conflict preemption principles.

D. Whether Section 211(c)(4)(B) is applicable to the LCFS

As set forth above, Section 211(c)(4)(B) grants California permission to disregard the express

2 ch 3 D 4 ve 5 st 6 ac

preemptive effects of Section 211(c)(4)(A) and to enact "control[s] or prohibition[s] respecting any characteristic or component of a fuel or fuel additive" for "purposes of motor vehicle emission control." Defendants argue the LCFS is a "control or prohibition respecting any fuel for the purpose of motor vehicle emissions control." Plaintiffs contend that Section 211(c)(4)(B) is inapplicable to the LCFS standard, and therefore does not authorize it, because it does not control a component of a fuel or a fuel additive and does not address motor vehicle emissions. For the following reasons, this Court agrees with plaintiffs to find that Section 211(c)(4)(B) is inapplicable. More specifically, in a motion to dismiss, this Court accepts as true plaintiffs' well-pleaded allegations. According to plaintiffs' allegations, as set forth below, the LCFS does not regulate a component of a fuel or fuel additive, and was not passed for the purpose of regulating motor vehicle emissions.

Plaintiffs allege that the LCFS does not regulate a component of a fuel or a fuel additive. Plaintiffs allege that carbon intensity "is not an inherent chemical property of a fuel, but rather it is reflective of the process in making, distributing, and using that fuel." Final Statement of Reasons, 951. Thus, the LCFS does not purport to control the "chemical or physical properties" of fuel used in California. As CARB explained:

A fuel's carbon intensity is inferred from the various steps taken to produce that fuel and the relative impacts to climate change associated with each step.... Thus, the relevant question for the LCFS is exactly the opposite of the above examples of actual fuel specifications: Exactly how was the product made, since the process for producing and distributing the product is what affects the product's carbon intensity?

A gallon of ethanol made from corn grown and processed in the Midwest will, under the microscope or other analytical device, look identical in every material way to a gallon of ethanol processed from sugar cane grown in Brazil. Both samples of ethanol will have the same boiling point, the same molecular composition, the same lower and upper limits of flammability—in other words, both will have identical physical and chemical properties because both products consist of 100% ethanol. On the other hand, the corn ethanol made from the Midwest will have different carbon intensity than the sugar cane ethanol from Brazil.

CARB, *Initial Statement of Reasons*, V-30 (Mar. 2009). Thus, the LCFS regulates "how a fuel or blendstock was made." *Id.* (emphasis in original).

As set forth above, defendants insist that Section 211(c)(4)(B) provides California "broad authority" to regulate any aspect of motor vehicle fuel, and is not limited to components of a fuel or fuel additives. This Court rejects this argument, as explained more fully above.

7 | 8 | f | 9 | N | 10 | H | 11 | t | 12 | t | 13 | H | 14 | C | 15 | 16 | N | 17 | 6 | 17 | 6 | 17 | 18 | 17 | 18 | 19 | H | 20 | C | 21 | S | 21 | S | 19 | H | 20 | C | 21 | S | 20 | C | 20

22

23

24

25

26

27

28

On a motion to dismiss, pursuant to Fed. R. Civ. P. 12(b)(6), this Court accepts as true the factual allegations of the complaints. Plaintiffs have alleged that lifecycle analysis of the LCFS does not regulate a component of a fuel of a fuel additive. Rather, the LCFS regulates how fuels that have identical chemical compositions are made. Based on these allegations, this Court concludes Plaintiffs have successfully pled that California's LCFS does not come within the Section 211(c)(4)(B) preemption exception. *Oxygenated Fuels*, 331 F.3d at 669.

Section 211(c)(4)(B) is inapplicable for the additional reason that the regulation was not passed for the purpose of motor vehicle emissions control. The Court first points out that the Court considers whether the LCFS specifically, rather than the entire statutory scheme under AB 32, was enacted for the purpose of motor vehicle emission control." Oxygenated Fuels, 331 F.3d at 669. Defendants argue that the fundamental purpose of the LCFS is to reduce motor vehicle carbon emissions. Plaintiffs counter that LCFS does not control motor vehicle emissions. Plaintiffs point out that although the chemical properties of ethanol are identical, which would mean that the motor vehicle emissions of any fuel containing ethanol would be the same, the LCFS assigns various carbon intensity rates and caps to ethanol. Plaintiffs allege that the lifecycle analysis of the LCFS, then, is not aimed at reducing motor vehicle emissions. Plaintiffs contend that the LCFS considers and regulates the direct and indirect effects of the process of making fuels, such as the land use, deforestation, conversion, and storage. Thus, Plaintiffs conclude the LCFS lifecycle approach that favors certain pathways that grow and process feedstocks with less energy use controls how a fuel is made was passed for the purpose of controlling emissions generally, not for the purpose of reducing emissions from a motor vehicle specifically. As in Oxygenated Fuels, this is a close call, but on a "motion to dismiss under Rule 12(b)(6)," this Court must find that the LCFS "does not come within the (c)(4)(B) exemption from preemption." 331 F.3d at 670.

E. Legislative History of Clean Air Act

Defendants cite legislative history suggesting that Congress intended California to have broad authority over its control over fuels and emissions. Plaintiffs cite legislative history to suggest that Congress expected Section 211(c)(4)(B) to be a narrow limitation, and did not consider that Section 211(c)(4)(B) would allow California to violate the Commerce Clause. At this early stage of the

proceedings, and even though Congressional intent is the touchstone of preemption analysis, the Court "hesitate[s] to examine the legislative history," because "the text of the Act [is] relatively clear." *Oxygenated Fuels*, 331 F.3d at 671. Further, even if [the Court] look[s] at the history cited by [defendants], it is composed primarily of statements of individual legislators. In analyzing legislative history, committee reports are 'the authoritative source for finding the Legislature's intent,' and statements of individual legislators are given much less weight." *Oxygenated Fuels*, 331 F.3d at 671 (quoting *Garcia v. United States*, 469 U.S. 70, 76 (1984)). In examining the competing legislative histories submitted, the Court resolves all questions in favor of plaintiffs in this Fed. R. Civ. P. 12(b)(6) motion. Accordingly, the legislative histories presented at this stage does not establish the facts Plaintiffs wish to assert.

F. Whether LCFS frustrates Clean Air Act's purposes and objectives

Having considered the scope of Section 211(c)(4)(B), and having ruled that Section 211(c)(4)(B) does not expressly authorize the LCFS and ordinary preemption principles apply, this Court turns now to whether plaintiffs have stated a claim for conflict preemption. The Court is mindful of the standards for review set forth above. Additionally, the Court considers that a "state law is invalid to the extent it 'actually conflicts with a . . . federal statute." *Int'l Paper v. Ouellette*, 479 U.S. 481, 491-92 (1987). Such a conflict can result in preemption where it is impossible for a private party to comply with both the state and federal requirements. *English v. Gen. Elec. Co.*, 496 U.S. 72, 79 (1990). Conflict preemption can also be found where "the state law 'stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress." *Int'l Paper*, 479 U.S. at 491-92 (quoting *Hines v. Davidowitz*, 312 U.S. 52, 67 (1941)).

Plaintiffs allege that the LCFS and EISA share a common goal—to reduce GHG emissions—and that EISA has an additional goal to protect energy independence and security. EISA declares that "the production of transportation fuels from renewable energy would help the United States meet rapidly growing domestic and global energy demands, reduce the dependence of the United States on energy imported from volatile regions of the world that are politically unstable, stabilize the cost and availability of energy, and safeguard the economy and security of the United States." EISA, Pub. L. 110-140, § 806(a)(4), 121 Stat. 1492, 1722 (2007). Plaintiffs further allege that the LCFS and EISA use

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

conflicting methods to achieve the goal of reducing GHG emissions that are vastly different in their treatment of corn ethanol. Plaintiffs argue that the LCFS frustrates the purposes of Section 211(o), as revised by EISA. Plaintiffs conclude that Section 211(o) preempts the LCFS, because the practical effects of the LCFS "interfere[] with the methods by which the federal statute was designed to reach [its] goal." *Gade v. Nat'l Solid Wastes Management Assn.*, 505 U.S. 88, 103 (1992).

Plaintiffs allege that to further the goals of energy independence and security, EISA provided the exemption for existing corn ethanol facilities, and those under construction in December 2007, from the need to demonstrate compliance with GHG reductions. Plaintiffs allege that EISA was passed to protect historical business investments that were made prior to the enactment of EISA; specifically, the first generation of corn ethanol producers. Congress expressed its intent to preserve the existing corn ethanol industry because the EPA's final RFS2 implementing rules acknowledges that "many of the corn ethanol plants may find it difficult if not impossible to retrofit existing plants to comply with the 20 percent GHG threshold." 75 Fed. Reg. 14, 689-90. Thus, the federal program preserves a level playing field among all ethanol producers in the United States, protects investments in all plants operating or under construction at the end of 2007, and gives corn ethanol producers feasible means of increasing their production if they demonstrate compliance with the GHG reduction targets set by Congress. The protection of the first generation of United States corn ethanol industry serves EISA's purposes of energy security and protection from foreign energy independence. In addition, plaintiffs allege that preserving the United States corn ethanol industry furthers Congress' goal to reduce GHG emissions, because the national corn ethanol industry is investing millions of dollars annually to research and develop cleaner fuels.

By contrast, plaintiffs allege that the California's LCFS protects only investments in California corn ethanol plants and ultimately will close the market to all non-California corn ethanol, including, as plaintiffs allege, corn ethanol that would be subject to the exception under Section 211(o)'s grandfather provision. Plaintiffs contend that according to CARB's economic analysis, the LCFS would result in the total elimination of Midwest corn ethanol from the California energy market by 2018. The same analysis showed that in the first year of implementation of the LCFS, sales of Midwest corn ethanol in California would drop by 15 to 20 percent from the levels that CARB estimated for 2010.

According to plaintiffs, the impact of the LCFS regulation on the national corn ethanol industry will be immense. California represents about 10 percent of the corn ethanol market in the United States, making it the largest market in the United States, on a state-by-state basis. The loss of 10 percent of the national market will add to the industry's chronic condition of overcapacity, which has in the past triggered plant closures and bankruptcy filings. Moreover, in the near term, a 15 to 20 percent reduction in demand for corn ethanol will have a devastating impact on some Midwest corn ethanol producers. Some Midwest producers are likely to be unable to compete in the California market starting in the first year of the LCFS program's mandate (2011), because no gasoline marketer will want to buy ethanol from a supplier to whom CARB has assigned a carbon-intensity score higher than gasoline. If those Midwest producers try to sell their ethanol in other States, price margins in an already saturated market will plummet, and some firms will fail. Based on these allegations, among others, plaintiffs conclude that the effects of the LCFS frustrate the full effectiveness of EISA.

In reply, defendants assert that "viewed in the correct light," the LCFS is a proper exercise of California's Clean Air Act authority, and complements Section 211(o). Defendants argue that the LCFS does not bar any fuel from the California market, and that there is no indication that Congress intended to preserve the California fuels market as it existed in 2007. Defendants do not address plaintiffs' well-pleaded allegations that one of EISA's goals is to protect the United States corn ethanol industry, nor do defendants challenge plaintiffs' allegations that the effects of the LCFS would stand as an obstacle to that goal.

Accepting plaintiffs allegations as true, this Court finds that plaintiffs state a claim that implementation of California's LCFS would "frustrate [] the full effectiveness of federal law." *Perez v. Campbell*, 402 U.S. 637, 652 (1971). Accordingly, defendants' motions to dismiss plaintiffs' preemption claims are denied.

COMMERCE CLAUSE

Defendants again rely on Section 211(c)(4)(B) to argue that the Section 211(c)(4)(B) authorizes the LCFS and, therefore, insulates the LCFS from the Commerce Clause. Moreover, defendants contend that the plain language of Section 211(c)(4)(B) authorizes California to adopt fuels regulations that burden interstate commerce. Defendants argue that Section 211(c)(4)(B) expressly authorizes California

to regulate "all fuels and fuel additives for the purposes of motor vehicle emissions control." Defendants submit that in enacting Section 211(c)(4)(B), Congress "explicitly conferr[ed] on California the authority to regulate fuels sold in California but manufactured both inside and outside of California," and that as a result "Congress directly authorized California to regulate a significant aspect of interstate commerce." Defendants argue that Section 211(c)(4)(B) authorizes what would otherwise be a Commerce Clause violation, and that in enacting Section 211(c)(4)(B), "Congress was keenly aware that allowing, and in fact, encouraging California to set stricter emission standards would affect interstate commerce." Defendants assert that "Congress explicitly granted California the authority to regulate fuels knowing full well that it would have effects on interstate commerce." Defendants conclude that Section 211(c)(4)(B) authorizes California to adopt regulations that violate the Commerce Clause. Plaintiffs' arguments fail for the following reasons.

"The Commerce Clause...is in its negative aspect...a limitation on the regulatory authority of the states. Thus, although a state has power to regulate commercial matters of local concern, a state's regulations violate the Commerce Clause if they are discriminatory in nature or impose an undue burden on interstate commerce." *Shamrock Farms Co. v. Veneman*, 146 F.3d 1177, 1179 (9th Cir. 1998) (citations and internal quotations omitted). "[F]or a state regulation to be removed from the reach of the dormant Commerce Clause, congressional intent must be unmistakably clear." *South-Central Timber Dev., Inc. v. Wunnicke*, 467 U.S. 82, 91 (1984). As a result, to authorize a Commerce Clause violation, Congress must do more than simply authorize a State to regulate in an area, it must "affirmatively contemplate otherwise invalid state legislation," *id.*, and clearly express its intent to "remove federal Constitutional constraints." *Sporhase v. Nebraska ex rel. Douglas*, 458 U.S. 941, 960 (1982). Defendants bear the burden of "demonstrating [this] clear and unambiguous intent." *Wyoming v. Oklahoma*, 502 U.S. 437, 458 (1992).

According to these standards, plaintiffs' Commerce Clause claims can only be dismissed if the defendants establish that Congress expressly, unmistakably, and unambiguously authorized California to violate the Commerce Clause in each of they ways alleged in the complaint. Plaintiffs argue that there is nothing in the text or history of the Clean Air Act that clearly evidences Congress' intent in Section 211(c)(4)(b) to "extend to [California] new powers...that [it] would not have possessed absent

the federal legislation." *Lewis v. BT Inv. Managers, Inc.*, 447 U.S. 27, 49 (1980). On the contrary, as the Ninth Circuit held in *Davis v. EPA*, "the structure of 211(c)(4) makes it clear that the **sole purpose** of 211(c)(4)(B) is to waive for California the express preemption provision found in 211(c)(4)(A)." 348 F.3d 772, 786 (9th Cir. 2003) (emphasis added).

Plaintiffs argue that defendants' motion to dismiss the Commerce Clause fails for two reasons. First, Section 211(c)(4)(B) cannot authorize a violation of the Commerce Clause because the "sole purpose of 211(c)(4)(B) is to waive for California the express preemption provision found in 211(c)(4)(A)." *Davis*, 348 F.3d at 786, and a federal statute that merely exempts state law from the preemptive effect of another federal provision does not authorize a violation of the Commerce Clause. *E.g. New England Power Co. v. New Hampshire*, 455 U.S. 331, 341 (1982). Second, Section 211(c)(4)(B) cannot authorize defendants to violate the Commerce Clause because the LCFS was not adopted pursuant to Section 211(c)(4)(B). To the extent defendants now claim otherwise, their argument is refuted by the statements defendants made when developing and adopting the LCFS, and, in all events, any dispute on this issue must be resolved in favor of plaintiffs in a motion to dismiss. For the following reasons, this Court agrees.

Under *Lewis*, *New England Power*, and *Wyoming*, a federal provision that exempts a state law from preemption under another federal statute is insufficient to exempt the state law from the requirements of the Commerce Clause. In addition, under *Davis*, this Ninth Circuit made clear that the "sole purpose of [211(c)(4)(B)] is to waive for California the express preemption provision found in [211(c)(4)(A)]. 348 F.3d at 786. Just as California is not, by virtue of Section 211(c)(4)(B), "authorized to negate the requirements imposed by Congress" in provisions other than Section 211(c)(4)(A), *id*. at 787, defendant likewise may not rely upon Section 211(c)(4)(B) to violate the requirements imposed by the Commerce Clause.

Moreover, the savings clauses of Clean Air Act and the EISA do not authorize defendants to violate the Commerce Clause. *See Wyoming*, 502 U.S. at 458; *Sporhase*, 458 U.S. 960; *New England Power*, 455 U.S. at 434; *Lewis*, 447 U.S. at 48-49. In each of these cases, the Supreme Court held that federal statutes that exempted state law from express preemption under a specific federal statute merely "define the extent of the federal legislation's preemptive effect on state law" and do not "alter the state

1
 2
 3

4 | 5 | 6 | 7 | 8 | 9 | 10 |

power otherwise imposed by the Commerce Clause." *New England Power*, 455 U.S. at 341. This rule applies even where a savings clause was intended to allow State regulation "more restrictive than federal law." *Lewis*, 447 U.S. at 48-49.

Ultimately, defendants fail to bear their burden to establish by clear and unmistakable evidence that Congress intended to exempt the LCFS from scrutiny under the Commerce Clause. Section 211(c)(4)(B) provides no express and unambiguous authority for California to violate the Commerce Clause. Section 211(c)(4)(B) exempts California from federal preemption in regulating components of fuels and fuel additives for the purposes of motor vehicle emissions control. That statute provides no explicit authority to regulate interstate and foreign commerce through a fuels provision. Defendants have failed to demonstrate that when it adopted Section 211(c)(4)(B), Congress "affirmatively contemplated" and authorized California (i) to discriminate against other states; (ii) engage in extraterritorial regulation of conduct outside of California; and (iii) impose burdens on interstate and foreign commerce that clearly outweigh local benefits. *Wunnicke*, 467 U.S. at 91. Defendants fail to support their position that "there is no limitation whatsoever as to any extraterritorial impact of a California fuels regulation." Accordingly, the motions to dismiss plaintiffs' commerce clause causes of action are denied.

CONCLUSION AND ORDER

For the foregoing reasons, this Court DENIES defendants' motions to dismiss.

IT IS SO ORDERED.

Dated: <u>June 16, 2010</u>

/s/ Lawrence J. O'Neill
UNITED STATES DISTRICT JUDGE

Appendix

Table 6. Carbon Intensity Lookup Table for Gasoline and Fuels that Substitute for Gasoline.

		Carbon Intensity Values (gCO₂e/MJ)		
Fuel	Pathway Description	Direct Emissions	Land Use or Other Indirect Effect	Total
Gasoline	CARBOB - based on the average crude oil delivered to California refineries and average California refinery efficiencies	95.86	0	95.86
	Midwest average; 80% Dry Mill; 20% Wet Mill; Dry DG S	69.40	30	99.40
	California average; 80% Midwest Average; 20% California; Dry Mill; Wet DGS; NG	65.66	30	95.66
	California; Dry Mill; Wet DGS; NG	50.70	30	80.70
	Midwest; Dry Mill; Dry DGS, NG	68.40	30	98.40
	Midwest; Wet Mill, 60% NG, 40% coal	75.10	30	105.10
Ethanol	Midwest; Wet Mill, 100% NG	64.52	30	94.52
from Corn	Midwest; Wet Mill, 100% coal	90.99	30	120.99
	Midwest; Dry Mill; Wet, QGS	60.10	30	90.10
	California; Dry Mill; Dry DGS, NG	58.90	30	88.90
	Midwest; Dry Mill; Dry DGS; 80% NG; 20% Biomass	63.60	30	93.60
	Midwest; Dry Mill; Wet DGS; 80% NG; 20% Biomass	56.80	30	86.80
	California; Dry Mill; Dry DGS; 80% NG; 20% Biomass	54.20	30	84.20
	California; Dry Mill; Wet DGS; 80% NG; 20% Biomass	47.44	30	77.44
	Brazilian sugarcane using average production processes	27.40	46	73.40
Ethanol from Sugarcane	Brazilian sugarcane with average production process, mechanized harvesting and electricity co-product credit	12.40	46	58.40
	Brazilian sugarcane with average production process and electricity co-product credit	20.40	46	66.40
	California NG via pipeline; compressed in CA	67.70	0	67.70
Compressed Natural	North American NG delivered via pipeline; compressed in CA	68.00	0	68.00
Gas	Landfill gas (bio-methane) cleaned up to pipeline quality NG; compressed in CA	11.26	0	11.26
	Dairy Digester Biogas to CNG	13.45	0	13.45

1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	

	North American NG delivered via pipeline; liquefied in CA using liquefaction with 80% efficiency	83.13	0	83.13
	North American NG delivered via pipeline; liquefied in CA using liquefaction with 90% efficiency	72.38	0	72.38
	Overseas-sourced LNG delivered as LNG to Baja; re-gasified then re-liquefied in CA using liquefaction with 80% efficiency	93.37	0	93.37
Liquefied	Overseas-sourced LNG delivered as LNG to CA; re-gasified then re-liquefied in CA using liquefaction with 90% efficiency	82.62	0	82.62
Natural Gas	Overseas-sourced LNG delivered as LNG to CA; no re-gasification or re-liquefaction in CA	77.50	0	77.50
	Landfill Gas (bio-methane) to LNG liquefied in CA using liquefaction with 80% efficiency	26.31	0	26.31
	Landfill Gas (bio-methane) to LNG liquefied in CA using liquefaction with 90% efficiency	15.56	0	15.56
	Dairy Digester Biogas to LNG liquefied in CA using liquefaction with 80% efficiency	28.53	0	28.53
	Dairy Digester Biogas to LNG liquefied in CA using liquefaction with 90% efficiency	17.78	0	17.78
	California average electricity mix	124.10	0	124.10
Electricity	California marginal electricity mix of natural gas and renewable energy sources	104.71	0	104.71
	Compressed H ₂ from central reforming of NG (includes liquefaction and re-gasification steps)	142.20	0	142.20
	Liquid H ₂ from central reforming of NG	133.00	0	133.00
Hydrogen	Compressed H ₂ from central reforming of NG (no liquefaction and re-gasification steps)	98.80	0	98.80
	Compressed H ₂ from on-site reforming of NG	98.30	0	98.30
	Compressed H ₂ from on-site reforming with renewable feedstocks	76.10	0	76.10