

No. 13-

IN THE
Supreme Court of the United States

AMERICAN FUEL & PETROCHEMICAL
MANUFACTURERS ASSOCIATION, *et al.*,
Petitioners,

v.

RICHARD W. COREY, IN HIS OFFICIAL CAPACITY AS
EXECUTIVE OFFICER OF THE CALIFORNIA AIR
RESOURCES BOARD, *et al.*,
Respondents.

**On Petition for a Writ of Certiorari
to the United States Court of Appeals
for the Ninth Circuit**

PETITION FOR A WRIT OF CERTIORARI

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QUESTION PRESENTED

Whether California's Low Carbon Fuel Standard is unconstitutional because it discriminates against out-of-state fuels and regulates interstate and foreign commerce that occurs wholly outside of California.

**PARTIES TO THE PROCEEDING AND RULE
29.6 CORPORATE DISCLOSURE STATEMENT**

Petitioners are American Fuel & Petrochemical Manufacturers Association, American Trucking Associations, and Consumer Energy Alliance (collectively, AFPM).

Respondents who were plaintiffs below are Rocky Mountain Farmers Union, Redwood County Minnesota Corn and Soybean Growers, Penny Newman Grain, Inc., Fresno County Farm Bureau, Nisei Farmers League, California Dairy Campaign, Rex Nederend, Growth Energy, the Renewable Fuels Association, and the Center for North American Energy Security.

Respondents who were defendants below are Richard W. Corey, in his official capacity as Executive Officer of the California Air Resources Board; 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, in his official capacity as member of the California Air Resources Board; Ronald O. Loveridge, in his official capacity as member of the California Air Resources Board; Edmund G. Brown, Jr., in his official capacity as Governor of the State of California; and Kamala D. Harris, Attorney General, in her official capacity as Attorney General of the State of California.

Respondents who were intervenor-defendants below are Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Conservation Law Foundation.

Pursuant to Supreme Court Rule 29.6, petitioners make the following disclosures:

1. National Petrochemical and Refiners Association (NPRA) is a national trade association of more than 450 companies. In January 2012, NPRA changed its name to American Fuel & Petrochemical Manufacturers Association (AFPM). AFPM's members include virtually all U.S. refiners and petrochemical manufacturers. AFPM has no parent companies, and no publicly held company has a 10% or greater ownership interest in AFPM.

2. American Trucking Associations, Inc. (ATA) is a District of Columbia non-profit corporation. Neither ATA nor any parent, subsidiary, or affiliate has issued shares or debt securities to the public.

3. Consumer Energy Alliance (CEA) is a nonprofit, nonpartisan organization with more than 230 affiliated organizations and tens of thousands of individual grassroots members that supports the thoughtful utilization of energy resources to help ensure improved domestic and global energy security and stable prices for consumers. CEA has no parent companies, and no publicly held company has a 10% or greater ownership interest in CEA.

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PETITION FOR A WRIT OF CERTIORARI

Petitioners American Fuel & Petrochemical Manufacturers Association, American Trucking Associations, and Consumer Energy Alliance (collectively, AFPM) respectfully petition for a writ of certiorari to review the judgment of the United States Court of Appeals for the Ninth Circuit in this case.

OPINIONS BELOW

The decision of the Ninth Circuit is reprinted in the Petition Appendix (Pet. App.) at 1a–74a and is reported at 730 F.3d 1070. The opinions concurring in and dissenting from the denial of rehearing en banc are reprinted at Pet. App. 228a–252a and reported at 740 F.3d 507. The relevant district court decisions can be found at 843 F. Supp. 2d 1071, 2011 WL 6936368, and 843 F. Supp. 2d 1042, and are reprinted at 75a–134a, 135a–171a, and 172a–225a.

JURISDICTION

The Ninth Circuit entered judgment on September 18, 2013, and denied timely petitions for rehearing en banc on January 22, 2014. This Court has jurisdiction under 28 U.S.C. § 1254.

STATUTORY AND REGULATORY PROVISIONS

The Commerce Clause provides that “Congress shall have Power ... To regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes.” U.S. Const. art. I, § 8, cl. 3. Relevant provisions of California’s Low Carbon Fuel Standard, Cal. Code Regs. tit. 17 (2009), are reproduced at Pet. App. 253a–298a.

INTRODUCTION

In the decision below, a divided panel of the Ninth Circuit rejected constitutional challenges to California’s Low Carbon Fuel Standard (LCFS) through which California regulates the average “carbon intensity” of transportation fuels used in California. Petitioners do not question California’s authority to reduce greenhouse gas (GHG) emissions from sources in California. Petitioners seek review because the decision below upholding California’s regulatory scheme conflicts with this Court’s precedent that the Constitution “forbids discrimination” by States against interstate and foreign commerce “whether forthright or ingenious,” *W. Lynn Creamery, Inc. v. Healy*, 512 U.S. 186, 201 (1994), and precludes States from “attach[ing] restrictions to exports or imports in order to control commerce in other States,” *C&A Carbone, Inc. v. Town of Clarkstown*, 511 U.S. 383, 393 (1994).

The panel majority below abandoned this controlling precedent and authorized California (and other States in the Ninth Circuit) to embrace illegitimate “legislative means” in an area of paramount importance to the national and international economy. *Chem. Waste Mgmt., Inc. v. Hunt*, 504 U.S. 334, 340 (1992). In doing so, the decision below upheld the LCFS even though California adopted methods for regulating ethanol and crude oil that, while fundamentally conflicting in other respects, each discriminate to benefit California’s economic interests over out-of-state and foreign competition.

First, the Ninth Circuit approved “forthright” discrimination against ethanol from the “Midwest” when it rejected, as “archaic formalism,” this Court’s decisions holding that a State law that discriminates on its face against interstate commerce must be evaluated under strict scrutiny. See *Or. Waste Sys., Inc. v.*

Dep't of Env'tl. Quality, 511 U.S. 93, 100–01 (1994). The LCFS discriminates on its face by imposing an economic penalty on fuels produced in the Midwest. Second, the court approved more “ingenious” but equally invidious discrimination by ruling that California could favor, by design, a specific in-state source of crude oil because California did not also extend that discriminatory advantage to other in-state producers. See *Bacchus Imports, Ltd. v. Dias*, 468 U.S. 263, 271 (1984). In doing so, the court ignored uncontroverted evidence in the administrative record reflecting that the LCFS was designed to benefit California’s economy. Finally, the court approved California’s adoption of a “lifecycle analysis” that extends California’s “police power beyond its jurisdictional bounds” by imposing restrictions on imported fuels based on the way they are produced and transported outside of California. *Carbone*, 511 U.S. at 393.

As explained by Judge Murguia, who dissented from the panel decision, and Judge Smith and the other six judges who would have granted rehearing en banc, the decision below “places the law of [the Ninth Circuit] squarely at odds with Supreme Court precedent” on an issue that “threatens to Balkanize our national economy.” Pet. App. 238a (Smith, J., dissenting from denial of rehearing en banc). Likewise, the decision below conflicts with decisions of other circuits that have properly applied this Court’s controlling legal standards. See, e.g., *id.* at 249a n.5, 250a n.6. Petitioners respectfully request that the Court grant review of the Ninth Circuit’s decision.

STATEMENT OF THE CASE

A. Regulatory Background

1. California’s LCFS regulates the “carbon intensity” of transportation fuels used in California

through the year 2020. LCFS §§ 95480, 95480.1(a)–(b). “Carbon intensity” refers to the total amount of GHG emissions associated with “all stages” of a fuel’s “lifecycle,” including all the steps required to produce the fuel and transport it to market. LCFS § 95481(a)(11), (28). Fuels with “identical physical and chemical properties” are assigned different carbon-intensity scores reflecting California’s evaluation of how they are produced and transported outside of California. See Excerpts of Record (ER)10:2360.

The LCFS imposes an annual maximum “average carbon intensity” for fuel producers and importers whose transportation fuels are sold in California. The baseline average carbon intensity of gasoline under the LCFS is 95.86 gCO₂e/MJ.¹ That baseline maximum average is reduced by a specified percentage each year, resulting in a 10% reduction by 2020. LCFS § 95482. The LCFS assigns a carbon-intensity score to every transportation fuel sold in California for use in motor vehicles. The regulation includes “Lookup Tables” containing the carbon intensities for various fuel “pathways,” *id.* § 95486(b), tbls.6 & 7, and requires producers to use the pathway that most closely corresponds to their production processes.

Providers whose fuels have an average carbon intensity greater than the annual maximum average generate “deficits”; those with an average carbon intensity lower than the annual maximum generate “credits.” *Id.* § 95485. Providers eliminate deficits by retiring credits from previous years or purchasing credits from other providers. *Id.* § 95484(b)(4). Viola-

¹ Carbon-intensity values are expressed in units of grams (g) of carbon dioxide (CO₂) equivalent (e) per megajoule (MJ) of energy (gCO₂e/MJ).

tion of the LCFS exposes a provider to fines, civil penalties, and incarceration. *Id.* § 95484(e)(2).

2. Midwest corn ethanol plays a dominant role in California’s current biofuel market. As explained by EPA, “over 94%” of current domestic ethanol “production capacity” comes from the Midwest, as compared to less than 1% (“0.8%”) from West Coast States. 75 Fed. Reg. 14,670, 14,745 (Mar. 26, 2010). The LCFS identified “Midwest” corn ethanol “fuel pathways” because they were “the most likely pathways at this time.” Supplemental Excerpts of Record (SER) 15:3620. Under the LCFS, California projects that Midwest corn ethanol would be eliminated from the California market. ER11:2726–32.

The corn ethanol pathways in Lookup Table 6 are differentiated along a number of parameters, including whether the production facility is located in “California” or the “Midwest.” For example, an ethanol producer in the Midwest who uses energy from natural gas and dry mill technology and who dries its distillers grains receives a score of 98.40 gCO₂e/MJ, whereas its identical counterpart in California receives a score of 88.90 gCO₂e/MJ—almost a 10% reduction. LCFS § 95486(b), tbl.6. In each case, the LCFS assigns “Midwest” corn ethanol a higher carbon intensity than its “California” counterpart.

As a result of this regulation, California explained that “[i]t is highly likely that supplies of ethanol with the lowest carbon intensity will be sent to California with the remaining ‘high intensity’ ethanol being sold outside of California.” Pet. App. 308a. California recognized that this “fuel shuffling” would “not result in reductions in” the total amount of global “greenhouse gas emissions” because shuffling would require unnecessary transportation, which may actually increase GHGs. *Id.*

3. As with ethanol, California has stated that the carbon intensity of crude oils differs based on the way they are produced and transported in interstate and foreign commerce. *E.g.*, Pet. App. 306a (“carbon intensities for mainstream crude oil production methods range from about 4 to more than 20 gCO₂e/MJ”). In contrast to ethanol, however, California high-carbon-intensity crude oil represents a significant portion of the state’s existing crude market. Nearly 15% of the existing California crude-oil market consists of a California high-carbon-intensity crude oil—California crude oil produced from thermal enhanced oil recovery (TEOR).

California accounted for these local economic interests by designing the crude-oil provisions in a manner that differs dramatically from the ethanol provisions. Instead of calculating individualized “fuel pathways,” California calculated an “average” carbon intensity that would apply to *all* crude oils that made up 2% or more of the “2006 California baseline crude mix.” However, “[e]merging crude oils” that made up less than 2% of the 2006 California baseline crude mix would not benefit from the assigned “average” if they were “high carbon intensity crude oils” with a “total production and transport carbon-intensity value greater than 15.00.” LCFS § 95486(b)(2)(A). These emerging high-carbon-intensity crude oils instead would be assigned their actual carbon intensities calculated by California.

Under these criteria, the *only* high-carbon-intensity crude oil that benefits from the default average score is California TEOR. Pet. App. 302a, 304a. By assigning California TEOR the baseline “average,” California reduces its overall carbon intensity for compliance with the LCFS by 10.82 gCO₂e/MJ—an amount *greater* than the entire carbon-intensity reduction re-

quired by the LCFS when fully implemented in 2020. LCFS § 95482(b).² Through this treatment of California TEOR, California predicted that crude-oil “refineries in the State will continue to operate at capacity” and that “[t]he displaced petroleum-based fuels will come at the expense of *imported* blendstocks.” ER10:2467 (emphasis added).

4. In the administrative record, California addressed environmental and economic effects of the LCFS. California explained that, unless other states and foreign countries adopt and implement standards like the LCFS, it is “highly likely” that the LCFS will merely result in “fuel shuffling,” whereby providers send their lower-carbon-intensity fuels to California and their higher-carbon-intensity fuels to other markets. Pet. App. 308a, 314–315a; SER15:3691. As a result, the LCFS would “not result in reductions in greenhouse gas emissions on a global scale.” Pet. App. 308a; *accord id.* at 315a (“The end result of this fuel ‘shuffling’ process is little or no net change in fuel carbon-intensity on a global scale.”). Because the effects of GHGs on the environment are, in California’s view, determined by aggregate global GHG emissions, its acknowledgment that the LCFS would have no effect on the overall amount of GHGs “on a global scale,” *id.* at 308a, means that the LCFS would provide no environmental benefit to California.

In contrast, California emphasized the LCFS’s significant benefits to California’s local economic inter-

² The LCFS assigns California TEOR the default carbon-intensity score of 8.07 gCO₂e/MJ for its production and transportation, even though California calculated the actual value to be 18.89 gCO₂e/MJ. ER4:789–90; Pet. App. 302a. In contrast, Alaskan light crude must use the baseline average, which *increases* its carbon intensity for production and transportation from 4.36 to 8.07 gCO₂e/MJ. ER4:789–90; ER11:2702.

ests. California recognized that the LCFS is “designed” to “stimulate the production and use of low-carbon fuels in California,” SER15:3611, and to “kee[p] more money in the State” by “[d]isplacing imported transportation fuels with biofuels produced in the State,” Pet. App. 317a. This is consistent with California’s goal of “develop[ing] the LCFS in a manner that minimizes costs and maximizes the total benefits to California.” *Id.* at 312a. Indeed, California explained that one of the LCFS’s “key advantages” is that it would “reduc[e] [California’s] dependence on foreign oil.” *Id.* at 309a.

B. Proceedings Below

1. In February 2010, petitioners, representing refineries operating within and outside of California, filed a complaint seeking a declaration that the LCFS impermissibly discriminates against interstate and foreign commerce and regulates commerce occurring wholly outside of California. A separate group of plaintiffs, the Rocky Mountain Farmers Union (RMFU) plaintiffs, filed a similar action in December 2009. The courts below considered the cases together.

The district court granted summary judgment to both groups of plaintiffs. The court held that, as to ethanol, the LCFS facially discriminates against Midwest ethanol by assigning it higher carbon-intensity scores than “physically and chemically identical” ethanol “produced the same way in California.” Pet. App. 95a; *id.* at 156a. As to crude oil, the district court held that the “design and practical effect” of the LCFS is to favor California TEOR by assigning it “an artificially favorable and lower carbon intensity value” compared to crude oils imported from other states and countries, thereby giving “an economic advantage to California TEOR” and “a mandatory economic dis-

advantage to out-of-state and foreign existing crude sources.” *Id.* at 162a, 170a.

The court further held that California had failed to show that its discrimination satisfied strict scrutiny because (i) California’s expert “concede[d] that California could ‘adopt a tax on fossil fuels’ to ‘reduce greenhouse gas emissions associated with California’s transportation sector’” and (ii) California acknowledged that GHG emissions could be reduced “by ‘increasing vehicle efficiency’ or ‘reducing the number of vehicle miles traveled.’” Pet. App. 109a, 167a–169a.

Finally, the district court concluded that the LCFS regulates extraterritorial commerce by “penaliz[ing]” imported fuels based on how they are produced and transported in other states and countries. Pet. App. 105a; *id.* at 168a–169a. The court held that “the LCFS impermissibly attempts to ‘control conduct beyond the boundary of the state’” and thereby extends California’s “‘police power beyond its jurisdictional bounds.’” *Id.* at 105a.

2. A divided panel of the Ninth Circuit reversed. The majority began with its view that “California has long been in the vanguard of efforts to protect the environment,” Pet. App. 5a, and ended with an exhortation that “California should be encouraged to continue and to expand its efforts to find a workable solution to lower carbon emissions, or to slow their rise,” *id.* at 64a. In between, the panel dismissed, without elaboration, what it characterized as “a few quotes from an expansive record” that revealed that California designed the LCFS to promote California’s in-state economic interests at the expense of out-of-state competitors. *Id.* at 50a n.13. The court further confirmed that it would not allow “archaic formalism” to “prevent action against a new type of harm” because

the Commerce Clause is neither a “suicide pact” nor “a blindfold.” *Id.* at 64a.

First, the majority held that the LCFS’s “regulation of ethanol does not facially discriminate against out-of-state commerce.” Pet. App. 5a. Even though this Court has held that “the purpose of, or justification for, a law has no bearing on whether it is facially discriminatory,” *Or. Waste*, 511 U.S. at 100, the Ninth Circuit ruled that “facial discrimination” occurs “where a statute or regulation distinguished between in-state and out-of-state products *and no nondiscriminatory reason for the distinction was shown*,” Pet. App. 28a (emphasis added). Although Table 6 of California’s regulation assigns “Midwest” ethanol higher carbon intensity scores than chemically identical “California” ethanol, the court ruled that this was not “facial discrimination” because, in the majority’s view, the State had made a “reasonable decision to use regional categories in the default pathways and in the text of Table 6.” *Id.* at 43a–44a. The majority thus circumvented strict scrutiny of the ethanol provisions by holding that the Commerce Clause “does not invalidate by strict scrutiny state laws or regulations that incorporate state boundaries for good and non-discriminatory reason.” *Id.* at 64a.

Judge Murguia dissented. She explained that the majority’s ruling “is inconsistent with Supreme Court precedent, which instructs that we must determine whether the regulation is discriminatory before we address the purported reasons for the discrimination.” Pet. App. 68a–69a (citing *Oregon Waste*). Applying strict scrutiny, Judge Murguia concluded “California has failed to meet its burden of showing that discriminating against out-of-state ethanol is the only way to reduce lifecycle GHG emissions.” *Id.* at 71a.

Second, the court concluded that (i) California designed its crude-oil provisions to avoid “shuffling” high-carbon-intensity crude oils used in California to markets outside California, (ii) “California TEOR benefited from an assessed carbon intensity value lower than its individual carbon intensity,” and (iii) California TEOR was the *only* high-carbon-intensity crude oil to receive this beneficial treatment. Pet. App. 19a–20a, 49a. Nevertheless, the court concluded that “[t]here was no protectionist purpose, no aim to insulate California firms from out-of-state competition.” *Id.* at 50a. In doing so, the court rejected petitioners’ showing, based on this Court’s decisions in *Bacchus* and *New Energy*, that discrimination in favor of an in-state interest is “no less discriminatory because it may burden some in-state competitors as well.” *Id.* at 49a. The court dismissed, without discussion, compelling evidence that the crude-oil provisions were designed to benefit California’s local economic interests. *Id.* at 50a n.13.

Finally, the majority ruled that the LCFS did not violate the Constitution’s prohibition on extraterritorial regulation. Pet. App. 51a–52a. The majority noted that, under this Court’s cases such as *Baldwin* and *Carbone*, “States and localities may not attach restrictions to exports or imports in order to control commerce in other States.” *Id.* at 54a–55a. The Ninth Circuit, however, held that California could “regulate commerce and contracts within [its] boundaries,”—*i.e.*, “imports”—“with the goal of influencing the out-of-state choices of market participants.” *Id.* at 57a. Indeed, the panel lauded California’s decision to “essentially assum[e] legal and political responsibility for emissions of carbon resulting from the production and transport, *regardless of location*, of transportation fuels actually used in California.” *Id.* at 62a.

(emphasis added). Judge Murguia did not “reach” the “extraterritorial conduct” issue because she concluded that the LCFS “facially discriminates.” *Id.* at 68a n.2.

3. The Ninth Circuit denied the petitions for rehearing en banc. In a separate concurrence, Judge Gould reiterated the panel majority’s refusal to apply “strict scrutiny” to a facially discriminatory law, and stated that application of strict scrutiny absent a showing of “discriminatory purpose or effect” is a “type of ‘archaic formalism’ that should not be encouraged by the Supreme Court.” Pet. App. 232a n.1.³

Judge Smith, joined by six judges, dissented from the denial of rehearing en banc. The dissent explained that the majority rejected “longstanding dormant Commerce Clause precedent as mere ‘archaic formalism,’” Pet. App. 242a, “and place[d] the law of this circuit squarely at odds with Supreme Court precedent” in the context of a “regulatory scheme that threatens to Balkanize our national economy,” *id.* at 238a. Judge Smith highlighted that seven States “which are major producers of corn and ethanol” supported rehearing because California’s regulations “clos[e] the California border to ethanol produced in Amici States in favor of chemically-identical ethanol

³ Judge Gould also offered his views on the prospect of “Supreme Court review” of his decision. Pet. App. 235a. He acknowledged that this Court’s review “could be helpful to clarify as soon as practical what states may do of their own accord to deter or slow global warming,” but suggested that “the record in this case is incomplete and thus unsuitable for understanding the full scope of the issues presented.” *Id.* In doing so, Judge Gould overlooked that the Ninth Circuit’s decision forecloses any further record development as to crude-oil discrimination, “facial” ethanol discrimination, and extraterritorial regulation, but establishes legal rules that require courts within the Ninth Circuit to disregard this Court’s established precedent.

produced within California.” *Id.* at 238a–239a. Judge Smith further explained that “the panel’s approval of California’s sweeping crude oil regulations also merited en banc review,” *id.* at 240a n.2, and that “[b]y penalizing certain out-of-state practices, California’s regulations control out-of-state conduct”—*i.e.*, regulate out-of-state production methods—“just as surely as a mandate would,” *id.* at 249a.

REASONS FOR GRANTING THE PETITION

The Court should grant review because the Ninth Circuit’s decision conflicts with this Court’s cases in an area of paramount importance to the national and international economy.

I. The Ninth Circuit held that it would not analyze under “strict scrutiny” a state law that discriminates based on “state boundaries” because that would allow “archaic formalism to prevent action against a new type of harm.” Pet. App. 64a. The Ninth Circuit’s ruling that the LCFS’s preferential treatment of “California” ethanol over chemically identical “Midwest” ethanol was not “facial discrimination” because California had offered a nondiscriminatory reason for preferring California ethanol conflicts directly with this Court’s precedent holding that “the purpose of, or justification for, a law has no bearing on whether it is facially discriminatory.” *Or. Waste*, 511 U.S. at 100. The ruling is critically important because it allowed the Ninth Circuit to circumvent strict scrutiny, which is the accepted framework (in this context and many others) for analyzing whether discrimination that purports to advance legitimate ends does so through illegitimate “legislative means.” *Chem. Waste*, 504 U.S. at 340. By rejecting this Court’s framework, the decision below “places the law of [the Ninth Circuit] squarely at odds with Supreme Court precedent.” Pet.

App. 238a (Smith, J., dissenting). And it creates a conflict with multiple federal courts of appeals and state courts of last resort. Certiorari is warranted to resolve these conflicts.

The panel’s decision likewise conflicts with this Court’s decisions that prohibit States from discriminating in favor of specific in-state interests even if the State does not favor *all* in-state interests. See *Bacchus*, 468 U.S. at 271; cf. *New Energy Co. of Ind. v. Limbach*, 486 U.S. 269, 275–76 (1988). The Ninth Circuit acknowledged that the crude-oil provisions benefited California TEOR, and that California TEOR was the only high-carbon-intensity crude oil that benefited. Thus, California designed the crude-oil provisions to preserve the local market for California TEOR. Nevertheless, the Ninth Circuit ruled that the crude-oil provisions “do not appear protectionist” when viewed “in the context of the full market.” Pet. App. 49a. In doing so, the Court simply disregarded California’s statements that it acted to benefit local industry. See *id.* at 50a n.13.

II. The Court also should grant review because the Ninth Circuit’s extraterritoriality holding conflicts with precedent of this Court and other circuits holding that a State “may not attach restrictions to exports or imports in order to control commerce in other States.” *Carbone*, 511 U.S. at 393. By allowing California to penalize imported fuels based on the way they are produced and transported in other States and countries—*i.e.*, based on commercial activities outside California that have no effect on the fuel’s composition or the GHGs it emits when used in California—the Ninth Circuit has allowed California to “extend [its] police power beyond its jurisdictional bounds.” *Id.* The result will be balkanization of the national economy that extends far beyond the produc-

tion and transportation of fuels. If California may penalize imported fuels based on their “carbon intensity,” it may likewise penalize every other imported product. And if California may restrict imports based on producers’ out-of-state activities, so may every other State. California should not be permitted to obstruct interstate and foreign commerce in an effort to impose its regulatory standards on commerce outside its boundaries.

I. THE NINTH CIRCUIT’S RULINGS ON DISCRIMINATION CONFLICT WITH DECISIONS OF THIS COURT AND OTHER COURTS OF APPEALS.

Review should be granted because the decision below conflicts with this Court’s precedent governing the analysis of state laws that discriminate on their face and by design against interstate and foreign commerce. The Ninth Circuit rejected settled precedent so that it could avoid application of strict scrutiny to California’s LCFS, when that scrutiny shows that the LCFS’s discrimination against out-of-state competition is neither unrelated to economic protectionism nor necessary to serve California’s goals of reducing GHG emissions.

A. Certiorari Is Warranted To Address The Ninth Circuit’s Rejection Of This Court’s Precedents On Facial Discrimination As “Archaic Formalism.”

1. Under settled precedent, facial discrimination against interstate and foreign commerce must be judged based on the language of the state law—irrespective of any asserted justification for differing treatment—and facially discriminatory statutes must be subjected to the “strictest scrutiny.” *Or. Waste*, 511 U.S. at 100–01. The Ninth Circuit panel dis-

missed this controlling precedent as “archaic formalism,” Pet. App. 64a, and, in doing so, created a conflict among the federal circuits and state courts of last resort.

On its face, the LCFS differentiates between “Midwest” ethanols and “California” ethanols, giving chemically identical “Midwest” ethanols higher carbon-intensity scores. Pet. App. 72a–73a. Indeed, the panel acknowledged that the LCFS expressly establishes “categories [that are] formed with reference to state boundaries,” *id.* at 39a, and that “[t]he default pathways listed on Table 6 do categorize fuels by their origin,” *id.* at 43a; see also *id.* at 72a–74a (reproducing Table 6 and illustrating the disparate treatment of Midwest and California ethanol); *id.* at 233a (Gould, J., concurring) (the “LCFS does attribute different carbon intensity values to fuels from different geographic areas”). In turn, the carbon-intensity scores assigned to Midwest ethanols place them at a disadvantage because the LCFS is designed so that “[t]he source of the ethanol” used in California will shift “to those suppliers who can produce it with lower carbon intensities.” SER15:3635.

The treatment of Midwest and California ethanols on the face of the LCFS meets the well-established definition of discrimination, which “simply means differential treatment of in-state and out-of-state economic interests that benefits the former and burdens the latter.” *Or. Waste*, 511 U.S. at 99. The panel concluded, however, that the LCFS is not facially discriminatory because “facial discrimination” occurs only “where a statute or regulation distinguish[es] between in-state and out-of-state products and no non-discriminatory reason for the distinction was shown.” Pet. App. 28a. Specifically, the panel held that it would “not invalidate by strict scrutiny state laws or

regulations that incorporate state boundaries for good and non-discriminatory reason.” *Id.* at 64a.

As Judge Murguia and the other judges dissenting from denial of rehearing recognized, the panel’s approach to facial discrimination directly contradicts this Court’s decisions. Specifically, in rejecting Oregon’s argument that it did not discriminate against imported waste because it had a good reason for treating that waste less favorably than domestic waste, this Court held that “the purpose of, or justification for, a law has no bearing on whether it is facially discriminatory.” *Or. Waste*, 511 U.S. at 100; see also *Camps Newfound/Owatonna, Inc. v. Town of Harrison*, 520 U.S. 564, 575–76 (1997) (“[i]t is not necessary to look beyond the text ... to determine that it discriminates against interstate commerce”); *New Energy*, 486 U.S. at 274 (“Ohio provision ... explicitly deprives certain products of generally available beneficial tax treatment because they are made in certain other States, and thus on its face” is discriminatory). Judge Murguia aptly explained that “[d]etermining whether a regulation facially discriminates against interstate commerce begins and ends with the regulation’s plain language.” Pet. App. 67a (following *Oregon Waste*). The panel majority’s contrary conclusion conflicts with this Court’s precedent.

2. The panel acknowledged this Court’s approach to facial discrimination but dismissed that binding precedent as “archaic formalism.” Pet. App. 64a. This Court’s approach is neither “archaic” nor empty “formalism.” Indeed, the Court continues to follow and reaffirm this settled framework. See, e.g., *Camps Newfound*, 520 U.S. at 579, 581–82 (evaluating discrimination on face of state law, and confirming that facially discriminatory laws are subject to the strictest scrutiny); *United Haulers Ass’n v. Oneida-*

Herkimer Solid Waste Mgmt. Auth., 550 U.S. 330, 338–39 (2007) (reaffirming that if a law is facially discriminatory, a court then evaluates whether it advances “a legitimate local purpose”).

The decision below conflicts with decisions of multiple federal courts of appeals and state courts of last resort which continue to apply this Court’s standards. Specifically, the panel’s facial discrimination ruling conflicts with decisions from the First, Second, Third, Fourth, Fifth, Sixth, Eighth, and Eleventh Circuits, which apply strict scrutiny to strike down “facially discriminatory” state laws.⁴ Likewise, the panel’s decision conflicts with decisions by state courts of last resort. For instance, in *Pacific Merchant Shipping*

⁴ See *Used Tire Int’l, Inc. v. Diaz-Saldana*, 155 F.3d 1, 3–4 (1st Cir. 1998) (holding that law is facially discriminatory without reference to purported justification and striking it down under strict scrutiny); *SSC Corp. v. Town of Smithtown*, 66 F.3d 502, 514 (2d Cir. 1995) (same); *Am. Trucking Ass’n v. Whitman*, 437 F.3d 313, 320–21 (3d Cir. 2006) (explaining that “the purpose of the law would not be relevant to whether the statute was discriminatory”); *Env’tl. Tech. Council v. Sierra Club*, 98 F.3d 774, 785–88 (4th Cir. 1996) (concluding that law “is not facially neutral” from face of the provision and does not withstand strict scrutiny); *Pelican Chapter, Associated Builders & Contractors, Inc. v. Edwards*, 128 F.3d 910, 917–18 (5th Cir. 1997) (discrimination on face of provision triggers strict scrutiny); *Piazza’s Seafood World, LLC v. Odom*, 448 F.3d 744, 750–51 & n.12 (5th Cir. 2006) (explaining that under the Foreign Commerce Clause “differential treatment ... without more, [is] facial discrimination subject to strict scrutiny”); *Waste Mgmt., Inc. of Tenn. v. Metro. Gov’t of Nashville & Davidson Cnty.*, 130 F.3d 731, 736 (6th Cir. 1997) (differential treatment on face of law triggers strict scrutiny); *Jones v. Gale*, 470 F.3d 1261, 1267–70 (8th Cir. 2006) (finding facial discrimination from face of state law); *Nat’l Solid Wastes Mgmt. Ass’n v. Ala. Dep’t of Env’tl. Mgmt.*, 910 F.2d 713, 720 (11th Cir. 1990) (holding that differential treatment on the face of law is facial discrimination, and that environmental purpose cannot be pursued by origin-based distinctions).

Ass'n v. Voss, 907 P.2d 430 (Cal. 1995), the California Supreme Court stated that “[i]n determining whether a state statute is *facially* discriminatory, the following matters are irrelevant: the justification that the state offers for the discrimination, the legitimacy of the state interests that the statute is designed to protect, the degree and scope of the discrimination, and the volume of commerce affected.” *Id.* at 437; see also *D.D.I., Inc. v. State ex rel. Clayburgh*, 657 N.W.2d 228, 235 (N.D. 2003) (“[A]lthough avoiding double taxation of North Dakota income is a legitimate legislative goal, ‘the purpose of, or justification for, a law has no bearing on whether it is facially discriminatory.’”); *Perini v. Comm’r of Rev.*, 647 N.E.2d 52, 56–58 (Mass. 1995) (ruling that a law’s justification has no bearing on whether it is facially discriminatory).

3. Finally, the Court’s framework for analyzing facially discriminatory statutes is not empty “formalism.” As the Court has often observed, “the evil of protectionism” that the Commerce Clause forbids “can reside in legislative means as well as legislative ends.” *City of Phila. v. New Jersey*, 437 U.S. 617, 626 (1978); *Chem. Waste*, 504 U.S. at 340 (same); *Maine v. Taylor*, 477 U.S. 131, 148 n.19 (1986). Applying strict scrutiny, this Court has “often examined a ‘presumably legitimate goal,’ only to find that the State attempted to achieve it by ‘the illegitimate means of isolating the State from the national economy.’” *Wyoming v. Oklahoma*, 502 U.S. 437, 456–57 (1992); see *Hunt v. Wash. Apple Adver. Comm’n*, 432 U.S. 333, 352 (1977); cf. *Adarand Constructors, Inc. v. Peña*, 515 U.S. 200, 226 (1995) (“searching judicial inquiry into the justification” for discrimination is necessary to determine whether it is permissible).

Indeed, the panel’s decision conflicts with this Court’s approach to facial discrimination in numer-

ous contexts, all of which first evaluate discrimination based on the face of a law and thereafter, if discriminatory, subject the law to searching scrutiny. See *Bartnicki v. Vopper*, 532 U.S. 514, 526 n.9 (2001) (under the First Amendment “the mere assertion of a content-neutral purpose [is not] enough to save a law which, on its face, discriminates based on content”); *Church of the Lukumi Babalu Aye, Inc. v. City of Hialeah*, 508 U.S. 520, 533 (1993) (explaining that the Court “must begin with [the law’s] text, for the minimum requirement of neutrality [under the Free Exercise Clause] is that a law not discriminate on its face”); *United Auto. Workers v. Johnson Controls, Inc.*, 499 U.S. 187, 199 (1991) (under Title VII, “the absence of a malevolent motive does not convert a facially discriminatory policy into a neutral policy with a discriminatory effect”); *Trans World Airlines, Inc. v. Thurston*, 469 U.S. 111, 121–22 (1985) (under the ADEA, court looks to the face of a policy to assess whether it discriminates based on age; such discrimination is then analyzed under a statutory defense).

Contrary to the panel’s decision, this Court’s decision in *Philadelphia* does not support the panel’s approach. The panel quoted *Philadelphia* to assert that a law is not facially discriminatory if there is “some reason, apart from ... origin” for the disparate treatment apparent on its face. Pet. App. 39a (quoting 437 U.S. at 627). But, as the judges dissenting from the denial of rehearing en banc explained, “the language from *Philadelphia* on which the majority relies has nothing to do with determining whether a regulation facially discriminates against interstate commerce. Rather, it merely shows that some discriminatory regulations may ultimately survive strict scrutiny.” *Id.* at 245a (Smith, J., dissenting) (citation omitted).

**B. The Ninth Circuit’s Approval Of The
LCFS’s Crude-Oil Provisions Conflicts
With This Court’s Precedent And War-
rants Review.**

Review by this Court also is necessary because the Ninth Circuit’s decision upholding the LCFS’s crude-oil provisions conflicts with this Court’s precedent striking down state laws that discriminate in favor of local interests at the expense of out-of-state competitors. See, *e.g.*, *Bacchus*, 468 U.S. 263.

1. As the Ninth Circuit acknowledged, the LCFS’s crude-oil provisions assign the same “average” carbon intensity to “existing” crude oils, and as a result “California TEOR,” which has an exceptionally high carbon-intensity value, “was treated favorably compared to out-of-state sources.” Pet. App. 47a–48a; *id.* at 49a (explaining that California TEOR was the only high-carbon-intensity crude oil that “benefited from an assessed [average] carbon intensity lower than its individual carbon intensity”). The Ninth Circuit further recognized that California designed these crude-oil regulations, in part, “to prevent the mere shift of high carbon intensity crude oils to other markets,” *id.* at 19a, and that California TEOR was the “only” “high carbon intensity crude oi[l]” protected in this manner under the LCFS, *id.* at 19a–20a.

California’s discrimination in favor of California TEOR is indistinguishable from the discrimination struck down in *Bacchus*. There, this Court considered a Hawaiian statute that exempted two alcohol products from an otherwise applicable 20% excise tax, but did not exempt other “[l]ocally produced sake and fruit liqueurs.” 468 U.S. at 265. This Court held that the “exemption [wa]s clearly discriminatory, in that it applie[d] only to locally produced beverages, *even though it d[id] not apply to all such products.*” *Id.* at

271 (emphasis added). Accordingly, this Court ruled that the excise tax exemption for two Hawaiian products violated the Commerce Clause. *Id.* at 273.

2. The Ninth Circuit held that *Bacchus* was inapposite because Hawaii “exempted the favored beverages with the explicit purpose of ‘encourag[ing] development of the Hawaiian liquor industry,’” Pet. App. 50a (alteration in original) (quoting *Bacchus*, 468 U.S. at 265), whereas “[n]o equivalent statement is present here,” *id.* That distinction is baffling. In developing the LCFS, California admitted that one of the LCFS’s “key advantages” was that it would “reduc[e] [California’s] dependence on foreign oil,” *id.* at 309a, and that “[d]isplacing imported transportation fuels with biofuels *produced in the State* keeps more money in the State,” *id.* at 317a (emphasis added). In fact, California predicted that crude-oil “refineries in the State will continue to operate at capacity” and that the “displaced petroleum-based fuels will come at the expense of imported blendstocks.” ER10:2467. Indeed, the Ninth Circuit itself agreed with California that one of its purposes in designing the crude-oil provisions was to prevent the “shift of high carbon intensity crude oils to other markets,” Pet. App. 19a, and that the only high-carbon-intensity crude oil to benefit from that design was California TEOR, *id.* at 20a; see also *id.* at 46a. As in *Bacchus*, the crude-oil provisions are designed to benefit an in-state product in California by shielding it from interstate and foreign competition.

Contrary to the Ninth Circuit’s conclusion, Pet. App. 50a, the LCFS is not immune from challenge because it benefits California’s one high-carbon-intensity crude oil and not other in-state crude oils. *Bacchus* struck down the preferential treatment given to two in-state products even though that prefer-

ential treatment did not extend to other in-state competitors. 468 U.S. at 271. Likewise, the Ninth Circuit’s ruling conflicts with *Carbone*, which held that discrimination favoring only one in-state entity “just makes the protectionist effect of the ordinance more acute.” 511 U.S. at 392. And, more generally, the Ninth Circuit’s determination conflicts with *New Energy*, which held that “neither a widespread advantage to in-state interests nor a widespread disadvantage to out-of-state competitors need be shown.” 486 U.S. at 275–76.

Finally, the panel was wrong in asserting that California’s statements in the administrative record “do not plausibly relate to a discriminatory design.” Pet. App. 50a n.13. To the contrary, California stated that the crude-oil provisions were designed to “*reduce* the incentive for regulated parties to comply with the LCFS by shifting to less carbon-intensive crude oils or refinery operations.” *Id.* at 300a (emphasis added). The LCFS protects California TEOR from competition from out-of-state crude oils by assigning it the more favorable “default average carbon intensity values.” *Id.* at 302a. California designed the LCFS to avoid displacement of California TEOR by imported crude oils with lower carbon intensities, consistent with its express strategy of decreasing dependence on “foreign imports of oil” and “keep[ing] more money in the State.” *Id.* at 316a–317a.

C. Review Is Necessary Because The LCFS Cannot Satisfy Strict Scrutiny Under This Court’s Precedent.

Review of the decision below is necessary because the Ninth Circuit’s efforts to circumvent strict scrutiny underscore its importance for ferreting out improper economic protectionism and assessing whether discrimination truly is necessary to achieve legiti-

mate local goals. Application of strict scrutiny shows that the LCFS was designed to promote “California’s energy industry at the expense of out-of-state competitors” in an area of critical importance to the national economy. Pet. App. 247a (Smith, J., dissenting); *e.g.*, *id.* at 317a (“Displacing imported transportation fuels with biofuels produced in the State keeps more money in the State.”).

Discriminatory state laws are invalid “unless [the State] can ‘sho[w] that [they] advanc[e] a legitimate local purpose that cannot be adequately served by reasonable nondiscriminatory alternatives.’” *Or. Waste*, 511 U.S. at 99–101 (second alteration in original) (citing cases). To be “legitimate,” the “local purpose” must be “unrelated to economic protectionism.” *Id.* at 106. That is, this Court’s cases “condemn as illegitimate ... any governmental interest that is not ‘unrelated to economic protectionism.’” *Id.* (rejecting state’s “benign” “characterization” of its law where it “incorporates a protectionist objective as well”).

First, the LCFS is not “unrelated to economic protectionism.” California acknowledges that at every turn it designed the LCFS to transform the interstate and foreign market for transportation fuels “in a manner that minimizes costs and maximizes the total benefits to California.” Pet. App. 312a. The LCFS’s ethanol provisions discriminate against Midwest ethanol—the dominant biofuel used in California—by *encouraging* its diversion to other jurisdictions and thereby promoting biofuel production in California. *Id.* at 308a. In contrast, the LCFS’s crude-oil provisions discriminate in favor of high-carbon-intensity California TEOR by *discouraging* its diversion to markets outside of California and protecting it from competition by out-of-state crude oils. *Id.* at 46a. These contradictions in the design of the LCFS can be

reconciled only because they both further California’s economic interests, including its goal of decreasing “dependence on foreign oil” and keeping “more money in the State.” *Id.* at 309a, 317a. Discrimination designed expressly to benefit in-state economic interests at the expense of out-of-state competitors is precisely what the Commerce Clause forbids.

Second, this discrimination is not necessary to further the goal of reducing global GHG emissions. See *Carbone*, 511 U.S. at 392 (requiring defendant to show that it has “no other means to advance” its local purpose than through discrimination). California’s own expert admitted below that “California could ‘adopt a tax on fossil fuels’ to ‘reduce greenhouse gas emissions associated with California’s transportation sector.’” Pet. App. 168a.

Nor has California shown that other nondiscriminatory means of reducing GHG emissions—for example, improving vehicle efficiency, reducing miles traveled, or regulating other sources of GHG emissions—would be inadequate. Indeed, California’s own analysis calls into doubt whether the LCFS would reduce global GHG emissions *at all*. California acknowledged that the LCFS would result in “fuel shuffling” that “would reduce the carbon intensity of the California market by altering the world-wide distribution of fuels” but would not “*reduce global GHG emissions*.” Pet. App. 19a (emphasis added); *id.* at 46a–47a (same). Despite the admittedly dubious benefit of the LCFS, California decided to adopt a discriminatory regime to grow in-state industry at the expense of out-of-state and foreign competitors.

II. THE NINTH CIRCUIT'S EXTRATERRITORIALITY HOLDING WARRANTS REVIEW.

The Ninth Circuit's extraterritoriality holding also warrants review. This Court has long held that States may not "attach restrictions to exports or imports in order to control commerce in other States," because doing so "would extend the [State's] police power beyond its jurisdictional bounds." *Carbone*, 511 U.S. at 393. That is precisely what the LCFS is designed to do. By upholding California's decision to penalize imported fuels based on the way they are produced and transported outside California, the Ninth Circuit approved California's stated assertion of "legal and political responsibility for emissions of carbon resulting from the production and transport" of transportation fuels "regardless of location." Pet. App. 62a. But California "has no power to project its legislation into" other States and countries. *Baldwin v. G.A.F. Seelig, Inc.*, 294 U.S. 511, 521 (1935). The Ninth Circuit's decision "departs from the holdings of [this] Court and [other] circuits," and "approves a regime that threatens the very sort of 'economic Balkanization'" the Commerce Clause was meant to prevent. Pet. App. 248a (Smith, J., dissenting).

1. The "Commerce Clause precludes the application of a state statute to commerce that takes place wholly outside of the State's borders, whether or not the commerce has effects within the State." *Healy v. Beer Inst.*, 491 U.S. 324, 336 (1989) (internal quotation marks and omission omitted); accord *Brown-Forman Distillers Corp. v. N.Y. State Liquor Auth.*, 476 U.S. 573, 579–84 (1986). By confining States' regulatory jurisdiction to commerce within their own borders, the Commerce Clause enforces territorial limits on state power that are inherent in the federal structure of the Constitution. See, e.g., *Shaffer v.*

Heitner, 433 U.S. 186, 197 (1977) (“[A]ny attempt ‘directly’ to assert extraterritorial jurisdiction over persons or property would offend sister States and exceed the inherent limits of the State’s power.”).⁵ These provisions “reflect the Constitution’s special concern both with the maintenance of a national economic union unfettered by state-imposed limitations on interstate commerce and with the autonomy of the individual States within their respective spheres.” *Healy*, 491 U.S. at 335–36. They also reflect bedrock principles of political representation and accountability: one State’s officials lack power to regulate the activities of people in other States whom they do not represent and to whom they are not accountable. See *S. Pac. Co. v. Ariz. ex rel. Sullivan*, 325 U.S. 761, 767 n.2 (1945).

In determining whether a law regulates extraterritorially, the “critical inquiry is whether the practical effect of the regulation is to control conduct beyond the boundaries of the State.” *Healy*, 491 U.S. at 336. At a minimum, this means that States “may not attach restrictions to exports or imports in order to control commerce in other States.” *Carbone*, 511 U.S. at 393. In *Baldwin*, this Court held that New York could not “put pressure” on out-of-state milk producers to raise their prices by prohibiting the resale of imported milk that was bought in another state at a price below New York’s minimum price. 294 U.S. at 521–

⁵ The structural limit on extraterritorial regulation is reflected in many other provisions of the Constitution, including Article IV’s Privileges and Immunities and Full Faith and Credit Clauses, Article I’s Import-Export Clause, and the Fourteenth Amendment’s Due Process Clause. See, e.g., Douglas Laycock, *Equal Citizens of Equal and Territorial States: The Constitutional Foundations of Choice of Law*, 92 Colum. L. Rev. 249, 315–18 (1992).

24. Likewise, *Carbone*, citing *Baldwin*, held that a town could not restrict waste exports “as a way to steer solid waste away from out-of-town disposal sites that it might deem harmful to the environment.” 511 U.S. at 393. These precedents hold that States may not impose “obstructions to the normal flow of commerce” in an effort to change commercial conduct in other States, *Baldwin*, 294 U.S. at 524, because this would “extend the [State’s] police power beyond its jurisdictional bounds,” *Carbone*, 511 U.S. at 393.

The Ninth Circuit’s decision conflicts with these precedents. The LCFS’s express purpose is to force out-of-state fuel producers to change the way they produce and transport fuels to avoid the price penalty the LCFS imposes on fuels with high carbon-intensity scores. LCFS § 95480; see Pet. App. 13a–14a. As California explained, by penalizing fuels based on their “lifecycle” GHG emissions, the LCFS requires out-of-state producers to “alter production methods, sources of power, or other aspects of their business in order ... to compete for business in California.” SER14:3578. That is precisely what this Court’s precedents forbid. Just as “[o]ne state may not put pressure ... upon others to reform their economic standards” by restricting imports, California may not “project its legislation” beyond its borders by conditioning access to its market on compliance with California’s regulatory policies. *Baldwin*, 294 U.S. at 521, 524.

Contrary to the Ninth Circuit’s assertion, California did not “properly bas[e] its regulation on the harmful properties of fuel.” Pet. App. 58a. Carbon intensity is not a property of fuel; it is a score that California assigns to the fuel based on California’s assessment of the GHG emissions from the fuel’s production, transportation, and combustion. ER10:2360; SER15:3700. Because fuels produced within and out-

side the State are physically identical, and thus produce the same emissions when combusted in California, the only variable—the factor that produces the price penalty—is the application of California’s regulatory policies to the emissions from the fuel’s production and transportation, activities that occur outside California. Those activities are beyond California’s jurisdiction, “whether or not the[y] ... ha[ve] effects within the State.” *Healy*, 491 U.S. at 336.

Moreover, there is a fundamental difference between regulating an imported *product* based on its harmful physical properties—which cause harm due to the product’s presence in the State—and restricting access to the California market based on the producer’s out-of-state commercial *activities*. The former is a proper exercise of the State’s police power; the latter, an improper attempt to “extend the [State’s] police power beyond its jurisdictional bounds.” *Carbone*, 511 U.S. at 393; see *Brown-Forman*, 476 U.S. at 580 (the “mere fact that the effects” of an extraterritorial law “are triggered only by [in-state] sales ... does not validate the law if it regulates the out-of-state transactions of [parties] who sell in-state”).⁶

Nor is it an answer to repackage the LCFS’s price penalty as an “incentiv[e].” Pet. App. 56a. No precedent supports the Ninth Circuit’s conclusion, contrary to *Carbone* and *Baldwin*, that States may restrict imports “with the goal of influencing the out-of-state

⁶ There is thus no merit to Judge Gould’s concern that striking down the LCFS “would spell the end of much beneficent state legislation.” Pet. App. 238a n.2. States would remain free to adopt safety standards for products sold in their own State. They could not, however, penalize imported goods because they were produced in factories that are subject to regulations that do not precisely mirror their own, which is the more apt analogy to the LCFS. See *id.* at 250–251a (Smith, J., dissenting).

choices of market participants.” *Id.* at 57a. The panel cited *Pharmaceutical Research & Manufacturers of America v. Walsh*, 538 U.S. 644 (2003), but “nothing in *Walsh* repudiates the principle that a state may not close its borders to out-of-state goods unless exporters alter their out-of-state conduct.” Pet. App. 251a n.7 (Smith, J., dissenting). The Maine law in *Walsh* was aimed at drug manufacturers’ *in-state* conduct (payment of rebates); it did not penalize imported drugs in an effort to impose Maine’s standards on manufacturers’ out-of-state production processes. Here, by contrast, the LCFS would fail to achieve its stated purpose if it did *not* change producers’ out-of-state production processes.

2. Review also is necessary because the decision below puts the Ninth Circuit “squarely at odds with [its] sister circuits.” Pet. App. 250a n.6 (Smith, J., dissenting). Following this Court’s precedents, the Seventh and Tenth Circuits have correctly held that a State may not restrict imports in an effort to impose its regulatory standards on commerce in other States. See *Nat’l Solid Wastes Mgmt. Ass’n v. Meyer*, 165 F.3d 1151 (7th Cir. 1999) (per curiam) (*Meyer II*); *Nat’l Solid Wastes Mgmt. Ass’n v. Meyer*, 63 F.3d 652 (7th Cir. 1995) (*Meyer I*); *Hardage v. Atkins*, 619 F.2d 871 (10th Cir. 1980) (all invalidating restrictions on imported waste not processed in accordance with the State’s standards). Unlike the decision below, these cases recognize that “[n]o state has the authority to tell other polities what laws they must enact or how affairs must be conducted outside its borders.” *Meyer II*, 165 F.3d at 1153; *accord Hardage*, 619 F.2d at 873 (a State may not obstruct commerce in an effort to “forc[e] its judgment with respect to hazardous wastes on its sister states”).

These cases cannot be distinguished on the ground that the laws they addressed applied to products that were “produced, sold, and used outside” the regulating State, whereas the LCFS applies only to fuels sold and used in California. Pet. App. 55a (citing *Meyer I*). In *Meyer II*, the Seventh Circuit struck down Wisconsin’s law even *after* it had been narrowed to apply only to Wisconsin-bound waste. 165 F.3d at 1152–53. Nor can these cases be distinguished because the laws there “require[d] other jurisdictions to adopt reciprocal standards” as a condition of importation. Pet. App. 55a. There is no material difference between conditioning favorable treatment on another State’s adoption of certain standards and conditioning favorable treatment on commercial actors’ conformance of their out-of-state conduct to those standards. Either way, the State is improperly attempting to impose its regulatory standards on commerce that occurs outside of the State. *Baldwin* confirms the point: the New York law there did not require other States to adopt New York’s minimum milk price, but attempted to achieve the same end by conditioning resale of imports on milk producers’ adherence to New York’s minimum price.

The decision below further conflicts with the First Circuit’s decision in *National Foreign Trade Council v. Natsios*, 181 F.3d 38 (1st Cir. 1999), *aff’d sub nom. Crosby v. Nat’l Foreign Trade Council*, 530 U.S. 363 (2000). That case invalidated a law imposing a 10% penalty on parties bidding for government contracts in Massachusetts if they did business in Burma. *Id.* That the law imposed a price “incentive” rather than a total ban was immaterial. See *New Energy*, 486 U.S. at 275 (whether a law bans “all transport of the subject product” or simply places the product at a “substantial commercial disadvantage” “makes no dif-

ference for purposes of Commerce Clause analysis”); cf. Pet. App. 60a–61a (asserting that under the LCFS “[n]o form of fuel would be excluded”). The law was invalid because its “intention and effect [was] to change conduct beyond Massachusetts’s borders.” 181 F.3d at 69. Likewise, the LCFS is invalid because its express intention and practical effect is to change conduct beyond California’s borders.

3. Finally, review is necessary because the decision below opens the door to unprecedented state regulation of extraterritorial commerce and with it the balkanization of the national economy. The logic of the Ninth Circuit’s decision is not limited to transportation fuels. Because all human activity generates GHG emissions, every imported product could be assigned a carbon-intensity score based on the emissions from its production and transportation. Thus, if California may penalize transportation fuels based on their carbon intensity, it may likewise penalize every other imported product, whether it be peaches from Georgia, cars from Michigan, milk from Vermont, or wine from France. See Pet. App. 250a–251a (Smith, J., dissenting). And “if [California] can insist on [fuel producers] doing things the [California] way in order to obtain access to the [California] market, other states can insist on similar or different prerequisites to their markets.” *Meyer I*, 63 F.3d at 662. This would produce the very sort of “competing and interlocking local economic regulation that the Commerce Clause was meant to preclude.” *Healy*, 491 U.S. at 337.

On the other hand, invalidation of the LCFS would not leave States without a remedy for GHGs emitted in other States. The remedy in these circumstances has never been for States to resort to self-help under state law. Rather, the answer lies with federal law. See *Am. Elec. Power Co. v. Connecticut*, 131 S. Ct.

2527, 2535–36 (2011). If California desires to reduce GHG emissions from the production and transportation of fuels in other States and countries, its remedy is to persuade the federal government to act pursuant to its broad authority over interstate and foreign commerce. See *Prudential Ins. Co. v. Benjamin*, 328 U.S. 408, 423 (1946) (“The commerce clause is in no sense a limitation upon the power of Congress over interstate and foreign commerce.”). California may not, however, arrogate to itself the power to regulate commerce outside its borders. Regulation of interstate and foreign commerce is reserved “to the Federal Government and may not be accomplished piecemeal through the extraterritorial reach of individual state statutes.” *Healy*, 491 U.S. at 340.

CONCLUSION

For these reasons, the petition for certiorari should be granted.

Respectfully submitted,

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APPENDIX

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APPENDIX A

UNITED STATES COURT OF APPEALS,
NINTH CIRCUIT

Nos. 12-15131, 12-15135

ROCKY MOUNTAIN FARMERS UNION; REDWOOD COUNTY
MINNESOTA CORN AND SOYBEAN GROWERS; PENNY
NEWMAN GRAIN, INC.; REX NEDEREND; FRESNO
COUNTY FARM BUREAU; NISEI FARMERS LEAGUE;
CALIFORNIA DAIRY CAMPAIGN; GROWTH ENERGY;
RENEWABLE FUELS ASSOCIATION; AMERICAN FUEL
& PETROCHEMICAL MANUFACTURERS ASSOCIATION,
FKA NATIONAL PETROCHEMICAL & REFINERS
ASSOCIATION; AMERICAN TRUCKINGS ASSOCIATIONS;
CENTER FOR NORTH AMERICAN ENERGY SECURITY;
THE CONSUMER ENERGY ALLIANCE,
Plaintiffs-Appellees,

v.

RICHARD W. COREY, IN HIS OFFICIAL CAPACITY AS
EXECUTIVE OFFICER OF THE CALIFORNIA AIR
RESOURCES BOARD; 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, IN HIS
OFFICIAL CAPACITY AS MEMBER OF THE CALIFORNIA AIR
RESOURCES BOARD; RONALD O. LOVERIDGE, IN HIS
OFFICIAL CAPACITY AS MEMBER OF THE CALIFORNIA AIR
RESOURCES BOARD; EDMUND G. BROWN, JR., IN HIS
OFFICIAL CAPACITY AS GOVERNOR OF THE STATE OF
CALIFORNIA; KAMALA D. HARRIS, ATTORNEY GENERAL,
IN HER OFFICIAL CAPACITY AS ATTORNEY
GENERAL OF THE STATE OF CALIFORNIA,
Defendants-Appellants,

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ENVIRONMENTAL DEFENSE FUND;
NATURAL RESOURCES DEFENSE COUNCIL; SIERRA
CLUB; CONSERVATION LAW FOUNDATION,
Intervenor-Defendants-Appellants.

ROCKY MOUNTAIN FARMERS UNION; REDWOOD COUNTY
MINNESOTA CORN AND SOYBEAN GROWERS; PENNY
NEWMAN GRAIN, INC.; REX NEDEREND; FRESNO
COUNTY FARM BUREAU; NISEI FARMERS LEAGUE;
CALIFORNIA DAIRY CAMPAIGN; GROWTH ENERGY;
RENEWABLE FUELS ASSOCIATION; AMERICAN FUEL &
PETROCHEMICAL MANUFACTURERS ASSOCIATION,
FKA NATIONAL PETROCHEMICAL & REFINERS
ASSOCIATION; AMERICAN TRUCKINGS ASSOCIATIONS;
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RIORDAN; JOHN R. BALMES; LYDIA H. KENNARD;
SANDRA BERG; RON ROBERTS; JOHN G. TELLES, IN HIS
OFFICIAL CAPACITY AS MEMBER OF THE CALIFORNIA AIR
RESOURCES BOARD; RONALD O. LOVERIDGE, IN HIS
OFFICIAL CAPACITY AS MEMBER OF THE CALIFORNIA AIR
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OFFICIAL CAPACITY AS GOVERNOR OF THE STATE OF
CALIFORNIA; KAMALA D. HARRIS, ATTORNEY GENERAL,
IN HER OFFICIAL CAPACITY AS ATTORNEY GENERAL
OF THE STATE OF CALIFORNIA,
Defendants-Appellants,

3a

ENVIRONMENTAL DEFENSE FUND;
NATURAL RESOURCES DEFENSE COUNCIL;
SIERRA CLUB; CONSERVATION LAW FOUNDATION,
Intervenor-Defendants-Appellants.

Argued and Submitted Oct. 16, 2012
Filed Sept. 18, 2013

Appeal from the United States District Court for the
Eastern District of California,
Lawrence J. O'Neill, District Judge,
Presiding. D.C. Nos. 1:09-cv-02234-LJO-GSA,
1:10-cv-00163-LJO-DLB

Before: D.W. NELSON, RONALD M. GOULD,* and
MARY H. MURGUIA, Circuit Judges.

OPINION

GOULD, Circuit Judge:

Whether global warming is caused by carbon emissions from our industrialized societies is a question for scientists to ponder. Whether, if such a causal relationship exists, the world can fight or retard global warming by implementing taxes or regulations that deter carbon emissions is a question for economists and politicians to decide. Whether one such regulatory scheme, implemented by the State of California, is constitutional under the United States Constitution's

* Judge Betty B. Fletcher was a member of the panel but passed away after oral argument. Judge Gould was drawn to replace her. He has read the briefs, reviewed the record, and listened to the tape of oral argument held on October 16, 2012.

Commerce Clause is the question that we consider in this opinion.

Plaintiffs-Appellees Rocky Mountain Farmers' Union et al. ("Rocky Mountain") and American Fuels & Petrochemical Manufacturers Association et al. ("American Fuels") separately sued Defendant-Appellant California Air Resources Board ("CARB"), contending that the Low Carbon Fuel Standard ("Fuel Standard"), Cal.Code Regs. tit. 17, §§ 95480-90 (2011), violated the dormant Commerce Clause and was preempted by Section 211(o) of the Clean Air Act, 42 U.S.C. § 7545(o), known as the federal Renewable Fuel Standard ("RFS"). In three rulings issued in December 2011, the district court held that the Fuel Standard (1) facially discriminated against out-of-state ethanol; (2) impermissibly engaged in the extraterritorial regulation of ethanol production; (3) discriminated against out-of-state crude oil in purpose and effect; and (4) was not saved by California's preemption waiver in the Clean Air Act. See *Rocky Mountain Farmers Union v. Goldstene* ("Rocky Mountain Ethanol"), 843 F.Supp.2d 1071, 1090, 1093 (E.D.Cal.2011); *Rocky Mountain Farmers Union v. Goldstene* ("Rocky Mountain Preemption"), 843 F.Supp.2d 1042, 1070 (E.D.Cal.2011); *Rocky Mountain Farmers Union v. Goldstene* ("Rocky Mountain Crude"), Nos. CV-F-09-2234 LJO DLB, CV-F-10-163 LJO DLB, 2011 WL 6936368, at *12-14 (E.D.Cal. Dec. 29, 2011). The district court applied strict scrutiny, and although it reasoned that the Fuel Standard served a legitimate state purpose, it concluded that CARB had not shown that its purpose could not be achieved in a nondiscriminatory way. *Rocky Mountain Ethanol*, 843 F.Supp.2d at 1093-94; *Rocky Mountain Crude*, 2011 WL 6936368 at *15-16. The district court granted American Fuels's motions for summary judgment on

its Commerce Clause claims, and it granted Rocky Mountain's request for a preliminary injunction, finding that Rocky Mountain was likely to succeed on the merits of its Commerce Clause challenge and raised "serious questions" about whether the Fuel Standard was preempted by the RFS. *Rocky Mountain Ethanol*, 843 F.Supp.2d at 1103. The appeals of the orders were consolidated.

We hold that the Fuel Standard's regulation of ethanol does not facially discriminate against out-of-state commerce, and its initial crude-oil provisions (the "2011 Provisions") did not discriminate against out-of-state crude oil in purpose or practical effect. Further, the Fuel Standard does not violate the dormant Commerce Clause's prohibition on extra-territorial regulation. We vacate the preliminary injunction and remand to the district court to consider whether the Fuel Standard's ethanol provisions discriminate in purpose or in practical effect. If so, then the district court should apply strict scrutiny to those provisions. If not, then the district court should apply the balancing test established in *Pike v. Bruce Church, Inc.*, 397 U.S. 137, 90 S.Ct. 844, 25 L.Ed.2d 174 (1970), to the Fuel Standard's ethanol provisions. The district court is directed to apply the *Pike* balancing test to the 2011 Provisions for crude oil. *Id.* To prevail under that test, Plaintiffs-Appellees must show that the Fuel Standard imposes a burden on interstate commerce that is "clearly excessive" in relation to its local benefits. *Id.* at 142, 90 S.Ct. 844.

I

A

California has long been in the vanguard of efforts to protect the environment, with a particular concern

for emissions from the transportation sector. Since 1957, California has acted at the state level to regulate air pollution from motor vehicles. *Motor & Equip. Mfrs. Ass'n v. EPA* (“*MEMA*”), 627 F.2d 1095, 1109 n.26 (D.C.Cir.1979) (citing 1957 Cal. Stats., chap. 239, § 1). Based on this expertise, “[t]he first federal emission standards were largely borrowed from California.” *Id.* at 1110 & n. 34.

When instituting uniform federal regulations for air pollution in the Clean Air Act, “Congress consciously chose to permit California to blaze its own trail with a minimum of federal oversight.” *Ford Motor Co. v. EPA*, 606 F.2d 1293, 1297 (D.C.Cir.1979). Section 209(a) of the Clean Air Act expressly prohibited state regulation of emissions from motor vehicles. 42 U.S.C. § 7543(a). But the same section allowed California to adopt its own standards if it “determine[d] that the State standards will be, in the aggregate, at least as protective of public health and welfare as applicable Federal standards.” *Id.* § 7543(b). Other states could choose to follow either the federal or the California standards, but they could not adopt standards of their own. *Id.* § 7507. The auto industry strenuously objected to this waiver provision and was “adamant that the nature of [its] manufacturing mechanism required a single national standard in order to eliminate undue economic strain on the industry.” *MEMA*, 627 F.2d at 1109 (quoting S.Rep. No. 403, at 33 (1967)). But Congress decided to encourage California “to continue and expand its pioneering efforts at adopting and enforcing motor vehicle emission standards different from and in large measure more advanced than the corresponding federal program; in short, to act as a kind of laboratory for innovation.” *Id.* at 1111. So California’s role as a leader in developing air-quality standards has been explicitly endorsed by Congress in

the face of warnings about a fragmented national market.

Continuing its tradition of leadership, the California legislature enacted Assembly Bill 32, the Global Warming Solutions Act of 2006. The legislature found that “[g]lobal warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California.” Cal. Health & Safety Code § 38501(a). These threats included “exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, [and] a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences.” *Id.* This environmental damage would have “detrimental effects on some of California’s largest industries, including agriculture, wine, tourism, skiing, recreational and commercial fishing and forestry” and would “increase the strain on electricity supplies.” *Id.* § 38501(b).

Faced with these threats, California resolved to reduce its greenhouse gas (“GHG”) emissions to their 1990 level by the year 2020, and it empowered CARB to design emissions-reduction measures to meet this goal. *Id.* § 38501(e), (g). In Assembly Bill 32, the legislature told CARB to issue regulations, including scoping and reporting requirements to achieve maximum technologically and economically feasible reductions, *see, e.g., id.* § 38561(a), a cap and trade program to enforce limits on carbon emissions from a variety of domestic sources, *id.* § 38562(c), and regulations seeking to reduce GHG emissions from the transportation sector, *see, e.g., id.* § 38562(a); Cal.Code Regs. tit. 13, § 1961.1.

The Assembly Bill 32 scoping plan required CARB to consider “the relative contribution of each source or

source category to statewide greenhouse gas emissions.” Cal. Health & Safety Code § 38561(e). In California, transportation emissions account for more than 40% of GHG emissions—the state’s largest single source. Cal. Exec. Order No. S-01-07 (January 18, 2007). Given the relative import of these emissions, CARB adopted a three-part approach designed to lower GHG emissions from the transportation sector: (1) reducing emissions at the tailpipe by establishing progressively stricter emissions limits for new vehicles (“Tailpipe Standards”), Cal.Code Regs. tit. 13, § 1961.1 (2001); (2) integrating regional land use, housing, and transportation planning to reduce the number of “vehicle miles traveled” each year (“VMT Standards”), *see* Cal. Gov’t Code § 65080; and (3) lowering the embedded GHGs in transportation fuel by adopting the Fuel Standard to reduce the quantity of GHGs emitted in the production of transportation fuel, Cal.Code Regs. tit. 17, §§ 95480-90.

The Tailpipe and VMT Standards work on the demand side: they aim to lower the consumption of GHG-generating transportation fuels. The Fuel Standard, by contrast, is directed at the supply side, creating an alternate path to emissions reduction by reducing the carbon intensity¹ of transportation fuels that are burned in California.

¹ A fuel’s carbon intensity is the amount of lifecycle greenhouse gas emissions caused by production and transportation of the fuel, per unit of energy of fuel delivered, expressed in grams of carbon dioxide equivalent per megajoule (gCO₂e/MJ). *See* Cal.Code Regs. tit. 17, § 95481(16). Carbon dioxide is the namesake gas of carbon intensity values, but it is not the only GHG. Others, such as methane, exert a more potent greenhouse effect than carbon dioxide. A fuel’s “carbon dioxide equivalent” refers to the total greenhouse potency of all the GHG emissions attributable to a fuel, expressed in terms of the amount of carbon dioxide that

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B

On January 18, 2007, the California governor issued Executive Order S-01-07, which directed CARB to adopt regulations that would reduce the average GHG emissions attributable to California's fuel market by ten percent by 2020. The Fuel Standard, developed in response, applies to nearly all transportation fuels currently consumed in California and any fuels developed in the future. *Id.* § 95480.1(a). In 2010, regulated parties were required to meet the Fuel Standard's reporting requirements but were not bound by a carbon intensity cap. *Id.* § 95482(a).² Beginning in 2011, the Fuel Standard established a declining annual cap on the average carbon intensity of California's transportation-fuel market. *Id.* § 95482(b). By setting a predictable path for emissions reduction, the Fuel Standard is intended to spur the development and production of low-carbon fuels, reducing overall emissions from transportation.

To comply with the Fuel Standard, a fuel blender must keep the average carbon intensity of its total volume of fuel below the Fuel Standard's annual limit. *Id.* § 95482(a). Fuels generate credits or deficits, depending on whether their carbon intensity is higher or lower than the annual cap. *Id.* § 95485(a). Credits may be used to offset deficits, may be sold to other

would exert the same greenhouse effect in the atmosphere. *See* CARB's Initial Statement of Reasons for the Fuel Standard ("ISOR") IV-1 (2009).

² A regulated party is the entity, generally a fuel blender or distributor, that must meet the carbon intensity reporting requirements. Cal.Code Regs. tit. 17, § 95484. A fuel producer may assume a Fuel Standard reporting and compliance obligation if the producer sells fuel to another regulated party. *Id.* § 95484(b).

blenders, or may be carried forward to comply with the carbon intensity cap in later years. *Id.* § 95485. With these offsets, a blender selling high carbon intensity fuels can comply with the Fuel Standard by purchasing credits from other regulated parties; no regulated party is required to sell any particular fuel or blend of fuels with a certain carbon intensity or origin. To build a durable and effective marketplace to stimulate the development of alternative fuels, the Fuel Standard created a market for trading, banking, and borrowing Fuel Standard credits. *Id.*; *see also* ISOR ES-1. CARB expects that the demand for credits will encourage producers, wherever they are located, to develop fuels with lower carbon intensities for use within the California market.

The Fuel Standard uses a “lifecycle analysis” to determine the total carbon intensity of a given transportation fuel. Because GHGs mix in the atmosphere, all emissions related to transportation fuels used in California pose the same local risk to California citizens. “That these climate change risks are widely-shared does not minimize [California’s] interest’ in reducing them.” *Rocky Mountain Ethanol*, 843 F.Supp.2d at 1093 (quoting *Massachusetts v. EPA*, 549 U.S. 497, 522, 127 S.Ct. 1438, 167 L.Ed.2d 248 (2007)) (alteration in original) (internal quotation marks omitted). One ton of carbon dioxide emitted when fuel is produced in Iowa or Brazil harms Californians as much as one emitted when fuel is consumed in Sacramento. The Tailpipe Standards control only emissions within California. Without lifecycle analysis, all GHGs emitted before the fuel enters a vehicle’s gas tank would be excluded from California’s regulation. Similarly, the climate-change benefits of biofuels

such as ethanol, which mostly come before combustion, would be ignored if CARB's regulatory focus were limited to emissions produced when fuels are consumed in California.

With a one-sided focus on consumption, even strong tailpipe-emissions standards would let GHG emissions rise during fuel production. Tailpipe standards could sharply reduce emissions from each individual vehicle without reducing net GHG emissions. In the extreme, rising emissions from production could raise total GHG emissions, completely subverting tailpipe-emissions limits. As an example, CARB analyzed the carbon intensity of ethanol produced in the Midwest using coal for electricity and heat. That method of production yields a carbon intensity more than twenty-percent higher than gasoline. *See* Cal.Code Regs. tit. 17, § 95486(b)(1), tbl. 6 ("Table 6"). No tailpipe standard could capture that difference. If the ethanol were credited for the carbon dioxide absorbed during cultivation of the corn feedstock, it would look superior to gasoline from a GHG perspective at the tailpipe. But any shift from gasoline to that form of ethanol would increase net GHG emissions and subject California to greater risk.

To avoid these perverse shifts, CARB designed the Fuel Standard to account for emissions associated with all aspects of the production, refining, and transportation of a fuel, with the aim of reducing total, well-to-wheel GHG emissions. *See id.* § 95481(a)(38). When these emissions are measured, CARB assigns a cumulative carbon intensity value to an individual fuel lifecycle, which is called a "pathway." *Id.* § 95481(a)(14).

The importance of lifecycle analysis is shown clearly by the diversity of the California fuel market, which

includes fuels made with many different source materials, called “feedstocks,” and production processes. As of June 2011, CARB has performed lifecycle analyses of fuels made from petroleum, natural gas, hydrogen, electricity, corn, sugarcane, used cooking oil, and tallow. *Id.* § 95486(b)(1). Fuels made from these feedstocks generate or avoid emissions at different stages of their production, transportation, and use, depending on when the conversion to fuel requires or displaces energy. An accurate comparison is possible only when it is based on the entire lifecycle emissions of each fuel pathway.

Recognizing the need for a reliable method to compare the lifecycle emissions of diverse fuels, the Argonne National Laboratory developed the Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation Model (“GREET”).³ GREET, first published in 1996 and revised and peer reviewed several times since, incorporates comprehensive data on the lifecycle emissions of various fuels. The Environmental Protection Agency (“EPA”) uses GREET for lifecycle analysis in the RFS, which mandates the use of low-carbon-intensity biofuels in the United States fuel supply. *See* 78 Fed.Reg. 14190, 14209 (Mar. 5, 2013). State agencies in Oregon, Minnesota, and New York have also used GREET to estimate emissions from the production of alternative fuels. In designing the Fuel Standard, CARB used GREET as the basis for its lifecycle-emissions model for fuels used in California. That peer-reviewed model, called CA-GREET, incorporates detailed information

³ *See generally* M.Q. Wang, Ctr. for Transp. Research, Argonne Nat’l Lab., U.S. Dep’t of Energy, *GREET 1.0—Transportation Fuel Cycles Model: Methodology and Use* 1-2 (1996), available at <http://www.transportation.anl.gov/pdfs/TA/500.pdf>.

about local conditions, including California's stringent environmental regulations and low-carbon electricity supply.

To provide a baseline against which to compare future reductions, CARB measured the average carbon intensity of the 2010 gasoline market at 95.86 grams of carbon-dioxide equivalent per mega joule ("gCO₂e/MJ") of energy. Cal.Code Regs. tit. 17, § 95486(b). In 2011, the carbon intensity cap was set 0.25% below the 2010 average. *Id.* § 95482. From 2011 to 2020, each annual limit will be a further reduction from that baseline. *Id.* § 95482(b). After reviewing ethanol sales in different markets during 2011, the Oil Price Information Service reported that fuels with lower carbon intensities received a price premium in California. So this program is starting to work as intended.

The Fuel Standard gives regulated parties two methods to comply with its reporting requirements. First, CARB issued a schedule of "default pathways" for a range of fuels that it anticipated would appear in the California market. These default pathways provided average values for the CA-GREET factors for these anticipated fuels. The resulting default pathways for ethanol appear in Table 6, which we attach as Appendix One. Under Method 1, regulated parties who sell fuel under a default pathway may rely on that pathway in reporting the carbon intensity of the conforming fuel. *Id.* § 95486(b).

Second, the Fuel Standard allows regulated parties to register individualized pathways using Method 2A or 2B. *Id.* § 95486(c), (d). Under Method 2A, a regulated party relies in part on a default pathway but proposes a replacement for one or more of the pathway's average values. *Id.* § 95486(c). Under Method

2B, a regulated party proposes a new, individualized pathway. *Id.* § 95486(d). To qualify for Method 2A, the proposed pathway must have a carbon intensity at least 5 gCO₂e/MJ less than the default pathway it seeks to replace, and it must be expected to supply more than 10 million gasoline-equivalent gallons per year in California. *Id.* § 95486(e)(2). There is no such threshold for Method 2B. *Id.* § 95486(e). Once CARB approves a Method 2A or 2B pathway, the pathway remains available for use without further documentation unless there is a material change. *Id.* § 95484(c)(2)(D). Thus fuel producers can take advantage of default and individualized carbon intensity values, and choose what is most advantageous.

Ethanol is an alcohol produced through fermentation and distillation of a variety of organic feedstocks. Most domestic ethanol comes from corn. Brazilian sugarcane dominates the import market. *See* 75 Fed.Reg. 14670, 14743, 14746-47 (Mar. 26, 2010). Ethanol production is a resource-intensive process, requiring electricity and steam. *Id.* at 14745. Steam is usually produced on site with coal or natural gas in dedicated boilers. *Id.* The choices of type of feedstock, source of electricity, and source of thermal energy affect the carbon intensity of the fuel pathway. To illustrate, ethanol made with sugarcane, hydro-electricity, and natural gas would produce lower emissions than ethanol made from corn and coal. *Id.* To determine the total carbon intensity values for each ethanol pathway, the CA-GREET model considers the carbon intensity of factors including: (1) growth and transportation of the feedstock, with a credit for the GHGs absorbed during photosynthesis; (2) efficiency of production; (3) type of electricity used to power the

plant; (4) fuel used for thermal energy; (5) milling process used; (6) offsetting value of an animal-feed co-product called distillers' grains, that displaces demand for feed that would generate its own emissions in production; (7) transportation of the fuel to the blender in California; and (8) conversion of land to agricultural use.

On Table 6, CARB separates these factors into those that are correlated with location and those that are not, using a regional identifier as a shorthand for the factors correlated with location. The milling process, co-product, and source of thermal energy are not correlated with region, so they are labeled individually. Factors related to transportation, efficiency, and electricity are correlated with a plant's location in the Midwest, Brazil, or California. For example, California ethanol plants are newer and more efficient on average than those in the Midwest, using less thermal energy and electricity in the production process. Also, the electricity available on the grid in the Midwest produces more emissions in generation than electricity in California or Brazil because much of the electricity in the Midwest is generated by coal-fired power plants. By contrast, California receives most of its power from renewable sources and natural gas, and Brazil relies almost entirely on hydroelectricity.⁴

Emissions from transporting the feedstock and the refined fuel are related to location, but they are not

⁴ According to CA-GREET, 78.7% of California's electricity was generated from natural gas and 21.3% from renewable energy. The Midwest received 51.6% of its electricity from coal, 33.5% from natural gas, and 14.9% from renewables. CARB's Final Statement of Reasons for the Fuel Standard ("FSOR") 579. More than 80% of Brazil's electricity was hydroelectric. FSOR 545.

directly proportionate to distance traveled. Transportation emissions reflect a combination of: (1) distance traveled, including distance traveled inside California to the fuel blender; (2) total mass and volume transported; and (3) efficiency of the method of transport. California ethanol produces the most transportation emissions because California grows no corn for ethanol, so its producers import raw corn, which is bulkier and heavier than the refined ethanol shipped by producers in Brazil and the Midwest. Brazilian ethanol produces fewer emissions than the 7,500 miles it travels would suggest because ocean tankers are very efficient.⁵ Midwest ethanol, going one third of that distance, produces the least.⁶ As a result, total transportation emissions for California ethanol are 8.1 gCO₂e/MJ, compared to 5.5 for Brazil and 4.8 for the Midwest. *Brazilian GREET Pathways* 6. This advantage in transportation is reflected in the location of ethanol plants, which are mainly located in the Midwest near sources of corn. 75 Fed.Reg. at 14745. California producers gain a larger credit for distillers' grains because those grains are consumed in California, so they do not travel as far from the plant to the point of consumption.

⁵ Shipping ethanol on an ocean tanker uses 29 to 43 BTUs per ton per mile, compared to 253 in a pipeline, 370 via rail, and 1,028 on a truck. CARB, *Detailed California-Modified GREET Pathways for Brazilian Sugarcane Ethanol: Average Brazilian Ethanol, With Mechanized Harvesting and Electricity Co-product Credit, With Electricity Co-product Credit* at 36 (Sept. 23, 2009), available at http://www.arb.ca.gov/fuels/lcfs/092309lcfs_cane_eto.pdf (hereinafter *Brazilian GREET Pathways*).

⁶ Compare Appendix Two, with *Brazilian GREET Pathways* at 6.

We attach two excerpts from Table 6 as appendices. Appendix One reproduces the ethanol pathways from the Midwest, California, and Brazil in Table 6. Appendix Two breaks out two default corn ethanol pathways from Table 6, individually showing each of the regionally correlated factors that determine the carbon intensity values of those pathways. The ethanol pathways detailed in Appendix Two both use a dry-mill production process with natural gas as a heat source and produce dry distillers' grains as a co-product. As shown in these tables, California's combination of more efficient plants and greater access to low-carbon electricity outweighs Midwest ethanol's lower transportation emissions, leaving California ethanol with a 7.2 gCO₂e/MJ lower carbon intensity for the factors correlated with region. California ethanol producers import their corn from the Midwest, so the two regions have identical carbon intensity assessments for land-use changes. Those factors, combined with the feedstock, milling method, treatments of distillers' grains, and heat source, determine the carbon intensity of each default pathway.

Producers from all three regions have obtained individualized pathways under Methods 2A or 2B. Cal.Code Regs. tit. 17, § 95486(b). Most of the Midwest ethanol producers who have done so either co-generate heat and electricity or use a renewable source for thermal energy, either of which can dramatically reduce GHG emissions. *Cf.* 75 Fed.Reg. at 14745. As of mid-2011, CARB had approved ethanol pathways with carbon intensities ranging from 56.56 to 120.99 gCO₂e/MJ. The individualized pathway with the lowest carbon intensity was achieved by a Midwest producer through Method 2A. The default pathway with the lowest carbon intensity is only slightly

higher: 58.40 gCO₂e/MJ for Brazilian sugarcane ethanol made with electricity generated on site. The highest carbon intensity, 120.99 gCO₂e/MJ, is for Midwestern wet-mill ethanol, using 100% coal for thermal energy. That is significantly higher than the 95.86 gCO₂e/MJ average carbon intensity of gasoline in 2010.

iii

The Fuel Standard also regulates crude oil and derivatives sold in California. Like the ethanol provisions, the 2011 Provisions required compliance with carbon intensity caps starting in January 1, 2011. Cal.Code Regs. tit. 17, § 95482(a). The 2011 Provisions remained in effect until December 31, 2011, when they were replaced by amended regulations. The 2011 Provisions are the subject of American Fuels's challenge and the district court's decision, so we do not discuss the amended provisions in detail.

Crude oil presents different climate challenges from ethanol and other biofuels. Corn and sugarcane absorb carbon dioxide as they grow, offsetting emissions released when ethanol is burned. By contrast, the carbon in crude oil makes a one-way trip from the Earth's crust to the atmosphere. For crude oil and its derivatives, emissions from combustion are largely fixed, but emissions from production vary significantly. As older, easily accessible sources of crude are exhausted, they are replaced by newer sources that require more energy to extract and refine, yielding a higher carbon intensity than conventional crude oil. As extraction becomes more difficult, emissions from crude oil will only increase, but CARB expects that fuels with carbon intensity values fifty to eighty percent lower than gasoline will be needed to meet its emissions-reduction targets. No matter how efficiently

crude oil is extracted and refined, it cannot supply this level of reduction. To meet California's ambitious goals, the development and use of alternative fuels must be encouraged.

With that in mind, CARB designed the 2011 Provisions to promote the development of alternative fuels rather than to encourage marginal emissions reductions from crude oil. Under the 2011 Provisions, no crude oil could be assessed a carbon intensity below the market average, but newer sources causing higher emissions were assessed at their individual carbon intensity. By design, this system required regulated parties to meet the Fuel Standard's carbon-intensity-reduction targets by supplying alternative fuels or buying credits from the sellers of alternative fuels. This was intended to direct investment into low-carbon alternative fuels rather than into the most efficient sources of crude oil, which would still lag behind improvements from alternative fuels that decrease the harmful emissions of carbon dioxide and other GHGs. By distinguishing between existing and emerging sources, CARB also hoped to prevent the mere shift of high carbon intensity crude oils to other markets. This process, known as "fuel shuffling," would reduce the carbon intensity of the California market by altering the world-wide distribution of fuels, but it would neither promote alternative-fuel development nor reduce net global GHG emissions.

The 2011 Provisions categorized crude oil in two ways: (1) as "existing" or "emerging" crude sources; and (2) as high-carbon-intensity crude oil ("HCICO") or non-HCICO. "Existing" sources were those that made up at least two percent of California's crude-oil market in 2006. All others were "emerging" sources. HCICOs were sources that produced more than 15

gCO₂e/MJ of emissions in extraction, production, and transportation. All existing sources were assessed the average carbon intensity value of the 2006 California market—8.07 gCO₂e/MJ—regardless of their individual value. Emerging non-HCICOs were also assessed that average value no matter how low their actual carbon intensity values. Emerging HCICOs were assessed their individual values. This system of categories is illustrated in the table below:

	Existing	Emerging
Non-HCICO	2006 Average	2006 Average
HCICO	(8.07)	Individual Carbon Intensity

In the benchmark year of 2006, California produced 38.7% of the oil it consumed. That 38.7% consisted of 6.10% oil recovered through gas-injection (“Gas Injection”), 1.3% oil recovered through water-flood methods (“Water Flood”), 16.5% light crude (“California Primary”), and 14.8% oil extracted using thermal-enhanced oil-recovery techniques (“California TEOR”). At 14.8% California TEOR was the only HCICO that made up more than two percent of the 2006 market. It had an individual carbon intensity of 18.89 gCO₂e/MJ, but as an existing source, it was assessed the market-average carbon intensity of 8.07 gCO₂e/MJ during 2011. Light crude from Alaska and abroad supplied most of the balance, but Venezuela heavy crude (“Venezuela Heavy”), which has a carbon intensity higher than California TEOR, filled 0.63% of the 2006 market.

In October 2011, CARB concluded that regulating crude oil by reference to the 2006 market was infeasible and issued new provisions. The new provisions

pursued the same goals with similar logic, but they eliminated the categories in the 2011 Provisions. Under the new system, all crude oil is assessed the same carbon intensity value, either the average of the California market in the year of sale or the average from 2010, whichever is higher. These amended provisions took effect on January 1, 2012.

On July 24, 2013, CARB issued a regulatory advisory that altered the treatment of 2011 sales of crude oil that had not yet been subject to lifecycle analysis (“Potential HCICOs”).⁷ Low Carbon Fuel Standard Regulatory Advisory 13-01, *available at* <http://www.arb.ca.gov/fuels/lcfs/072413lcfs-rep-adv.pdf>. CARB had previously stated that credits related to those sales would be adjusted once lifecycle analysis was performed. *See* Low Carbon Fuel Standard Regulatory Advisory 10-04A, at 2-4 (June 22, 2011), *available at* <http://www.arb.ca.gov/fuels/lcfs/070111lcfs-rep-adv.pdf>. With Advisory 13-01, CARB instead told regulated parties that retroactive adjustment of credit balances would not be required. For sales during 2011, Potential HCICOs would be treated like non-HCICOs and assigned the average carbon intensity of the California market, essentially applying the amended provisions to Potential HCICOs one year earlier than planned. Advisory 13-01, at 2-3.

C

In December 2009, Rocky Mountain filed a complaint challenging the ethanol provisions of the Fuel

⁷ In 2011, CARB published a list of more than 160 verified non-HCICOs, Advisory 10-04B at 6-10, and produced nine default crude-oil pathways with carbon intensities in the HCICO range. *See* Cal.Code Regs. tit. 17, § 95486(b)(1), Table 8, Carbon Intensity Lookup Table for Crude Oil Production and Transport.

Standard, alleging that they violated the dormant Commerce Clause and were preempted by the RFS. In February 2010, American Fuels challenged both the ethanol and the crude-oil provisions on similar grounds. Rocky Mountain sought a preliminary injunction on its Commerce Clause and preemption claims. American Fuels moved for summary judgment on its Commerce Clause claims. CARB filed cross-motions for summary judgment on all grounds.

On December 29, 2011, the district court granted Rocky Mountain's request for a preliminary injunction and American Fuels's partial motion for summary judgment, concluding that the Fuel Standard violated the dormant Commerce Clause by (1) engaging in extraterritorial regulation, (2) facially discriminating against out-of-state ethanol, and (3) discriminating against out-of-state crude oil in purpose and effect. The district court then determined that CARB did not show that the Fuel Standard could survive strict scrutiny.

The district court granted partial summary judgment in favor of CARB on its cross-motion, concluding that the Fuel Standard is a control or prohibition respecting a characteristic or component of a fuel under section 211(c)(4)(B) of the Clean Air Act, but it denied summary judgment on whether that section prevents scrutiny of the Fuel Standard under the Commerce Clause. CARB timely appealed. We stayed the district court's judgments pending this appeal.

II

We review *de novo* a district court's rulings on cross-motions for summary judgment. *CRM Collateral II, Inc. v. Tricounty Metro. Transp. Dist. of Or.*, 669 F.3d 963, 968 (9th Cir.2012). A grant of summary judgment

is appropriate where “the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” Fed.R.Civ.P. 56(a). A district court’s resolution of federal constitutional claims is also reviewed *de novo*. *Black Star Farms LLC v. Oliver*, 600 F.3d 1225, 1229 (9th Cir.2010).

We review an order granting a preliminary injunction for abuse of discretion. *Stormans Inc. v. Selecky*, 586 F.3d 1109, 1119 (9th Cir.2009) (citation omitted). We will reverse if the order was based on clearly erroneous findings of fact or on an erroneous legal standard. *Id.*

III

Plaintiffs contend that the Fuel Standard’s ethanol and crude-oil provisions discriminate against out-of-state commerce and regulate extraterritorial activity. CARB disagrees and, in the alternative, contends that Section 211(c)(4)(B) of the Clean Air Act authorizes the Fuel Standard under the Commerce Clause. We address each claim in turn.

The Commerce Clause provides that “Congress shall have Power . . . [t]o regulate Commerce . . . among the several States.” U.S. Const., art. I, § 8, cl. 3. This affirmative grant of power does not explicitly control the several states, but it “has long been understood to have a ‘negative’ aspect that denies the States the power unjustifiably to discriminate against or burden the interstate flow of articles of commerce.” *Or. Waste Sys., Inc. v. Dep’t of Env’tl. Quality of State of Or.*, 511 U.S. 93, 98, 114 S.Ct. 1345, 128 L.Ed.2d 13 (1994) (citing *Wyoming v. Oklahoma*, 502 U.S. 437, 454, 112 S.Ct. 789, 117 L.Ed.2d 1 (1992)). Known as the “negative” or “dormant” Commerce Clause, this aspect

is not a perfect negative, as “the Framers’ distrust of economic Balkanization was limited by their federalism favoring a degree of local autonomy.” *Dep’t of Revenue of Ky. v. Davis*, 553 U.S. 328, 338, 128 S.Ct. 1801, 170 L.Ed.2d 685 (2008) (citations omitted). Within the federal system, a “courageous state may, if its citizens choose, serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country.” *New State Ice Co. v. Liebmann*, 285 U.S. 262, 311, 52 S.Ct. 371, 76 L.Ed. 747 (1932) (Brandeis, J., dissenting). If successful, those experiments may often be adopted by other states without Balkanizing the national market or by the federal government without infringing on state power.

“The modern law of what has come to be called the dormant Commerce Clause is driven by concern about ‘economic protectionism—that is, regulatory measures designed to benefit in-state economic interests by burdening out-of-state competitors.’” *Davis*, 553 U.S. at 337-38, 128 S.Ct. 1801 (quoting *New Energy Co. of Ind. v. Limbach*, 486 U.S. 269, 273-74, 108 S.Ct. 1803, 100 L.Ed.2d 302 (1988)). For dormant Commerce Clause purposes, economic protectionism, or discrimination, “simply means differential treatment of in-state and out-of-state economic interests that benefits the former and burdens the latter.” *Or. Waste Sys., Inc.*, 511 U.S. at 99, 114 S.Ct. 1345. “[O]f course, any notion of discrimination assumes a comparison of substantially similar entities.” *Gen. Motors Corp. v. Tracy*, 519 U.S. 278, 298, 117 S.Ct. 811, 136 L.Ed.2d 761 (1997). If a statute discriminates against out-of-state entities on its face, in its purpose, or in its practical effect, it is unconstitutional unless it “serves a legitimate local purpose, and this purpose could not be served as well by available nondiscriminatory means.” *Maine v. Taylor*, 477 U.S. 131, 138, 106 S.Ct.

2440, 91 L.Ed.2d 110 (1986) (internal quotation marks omitted). Absent discrimination, we will uphold the law “unless the burden imposed on [interstate] commerce is clearly excessive in relation to the putative local benefits.” *Pike*, 397 U.S. at 142, 90 S.Ct. 844.

A

The district court concluded that the Fuel Standard facially discriminated against out-of-state corn ethanol by (1) differentiating between ethanol pathways based on origin and (2) discriminating against out-of-state ethanol based on factors within the CA-GREET formula that were “inextricably intertwined with origin.” *Rocky Mountain Ethanol*, 843 F.Supp.2d at 1087.

i

Before we consider whether the Fuel Standard discriminates against out-of-state ethanol, we must determine which ethanol pathways are suitable for comparison. *Tracy*, 519 U.S. at 298, 117 S.Ct. 811. Entities are similarly situated for constitutional purposes if their products compete against each other in a single market. *Id.* at 299, 117 S.Ct. 811. If they do, it is irrelevant whether they are made from different materials or if one poses a substantial competitive threat to another. *Bacchus Imports, Ltd. v. Dias*, 468 U.S. 263, 268-69, 104 S.Ct. 3049, 82 L.Ed.2d 200 (1984).

The district court concluded that all Brazilian ethanol pathways and all CA-GREET factors correlated with origin were outside the bounds of comparison. The district court explained, “Because the [Fuel Standard] makes production process, feedstock and origin relevant, comparing pathways with different

production processes or feedstocks is a red herring.” *Rocky Mountain Ethanol*, 843 F.Supp.2d at 1089. The district court defined “production processes” as only those factors not correlated with origin in the default pathways. *Id.* After excluding sugar cane ethanol and all GHG emissions related to transportation, electricity, and plant efficiency from comparison, the district court concluded that “the [Fuel Standard] discriminates on the basis of origin.” *Id.* But this selective comparison, which excludes relevant fuel pathways and important contributors to GHG emissions, cannot support the district court’s finding of discrimination.

As Plaintiffs strenuously maintain and all parties agree, ethanol from every source has “identical physical and chemical properties.” *Rocky Mountain Ethanol*, 843 F.Supp.2d at 1081 (quoting ISOR V-30). Indeed, the market relies on this undifferentiated structure because ethanol from different regions made with different feedstocks is regularly mixed together in the fuel supply. Ethanol from Brazil, the Midwest, and California may end up blended in the same gallon of fuel. Because of this close competition, all sources of ethanol in the California market should be compared, and the district court erred in excluding Brazilian ethanol from its analysis. *See Tracy*, 519 U.S. at 298-99, 117 S.Ct. 811.

The district court also erred by ignoring GHG emissions related to: (1) the electricity used to power the conversion process, (2) the efficiency of the ethanol plant, and (3) the transportation of the feedstock, ethanol, and co-products. Those factors contribute to the actual GHG emissions from every ethanol pathway, even if the size of their contribution is correlated with their location. Instead of considering all sources of GHG emissions, the district court concluded that

different pathways were equivalent if they used the same feedstock and what the court called the “production process”—the type of milling process, treatment of the co-product, and source of thermal energy—regardless of their carbon intensity values for the remaining factors.

But these pathways are not equivalent. As the district court concluded, their carbon intensities are “different according to lifecycle analysis.” *Rocky Mountain Ethanol*, 843 F.Supp.2d at 1088. Each factor in the default pathways is an average based on scientific data, not an ungrounded presumption that unfairly prejudices out-of-state ethanol, whether it is an average value for the use of coal in a boiler or for the shipment of raw corn from the Midwest to California. To the atmosphere, emissions related to an ethanol plant’s source of electrical energy are no less important than those caused by a plant’s source of thermal energy. If we ignore these real differences between ethanol pathways, we cannot understand whether the challenged regulation responds to genuine threats of harm or to the mere out-of-state status of an ethanol pathway. All factors that affect carbon intensity are critical to determining whether the Fuel Standard gives equal treatment to similarly situated fuels.

ii

Under the dormant Commerce Clause, distinctions that benefit in-state producers cannot be based on state boundaries alone. But a regulation is not facially discriminatory simply because it affects in-state and out-of-state interests unequally. If California is to assign different carbon intensities to ethanol from different regions, there must be “some reason, apart from their origin, to treat them differently.”

Philadelphia v. New Jersey, 437 U.S. 617, 627, 98 S.Ct. 2531, 57 L.Ed.2d 475 (1978).

Following this logic, the Supreme Court has consistently recognized facial discrimination where a statute or regulation distinguished between in-state and out-of-state products and no nondiscriminatory reason for the distinction was shown. For example, in *Oregon Waste*, the Supreme Court considered an Oregon statute that imposed a \$2.25 per ton surcharge on out-of-state waste but charged in-state waste only 85 cents. 511 U.S. at 96, 114 S.Ct. 1345. This fee differential was discriminatory because out-of-state waste was no more harmful or costly than waste generated within the state, leaving no basis for differential treatment other than the state of origin. *Id.* at 101, 114 S.Ct. 1345. The Court explained, however, that “if out-of-state waste did impose higher costs on Oregon than instate waste, Oregon could recover the increased cost through a differential charge on out-of-state waste.” *Id.* at 101 n. 5, 114 S.Ct. 1345. In a similar case, the Court struck down as discriminatory an Alabama law that imposed a fee on imports of hazardous waste from out of state when there was no association between place of origin and risk to Alabama. *Chem. Waste v. Hunt*, 504 U.S. 334, 112 S.Ct. 2009, 119 L.Ed.2d 121 (1992). Rather, Alabama admitted that “[t]he risk created by hazardous waste and other similarly dangerous waste materials [was] proportional to the *volume* of such waste.” *Id.* at 344 n. 7, 112 S.Ct. 2009. As it did in *Oregon Waste*, the Court explained that a disposal fee calibrated to the actual risk imposed by hazardous waste, whether imported or domestic, would have been appropriate. *Id.* at 344, 112 S.Ct. 2009.

Unlike these discriminatory statutes, the Fuel Standard does not base its treatment on a fuel's origin but on its carbon intensity. The Fuel Standard performs lifecycle analysis to measure the carbon intensity of all fuel pathways. When it is relevant to that measurement, the Fuel Standard considers location, but only to the extent that location affects the actual GHG emissions attributable to a default pathway. Under dormant Commerce Clause precedent, if an out-of-state ethanol pathway does impose higher costs on California by virtue of its greater GHG emissions, there is a nondiscriminatory reason for its higher carbon intensity value. *See id.* Stated another way, if producers of out-of-state ethanol actually cause more GHG emissions for each unit produced, because they use dirtier electricity or less efficient plants, CARB can base its regulatory treatment on these emissions. If California is to successfully promote low-carbon-intensity fuels, countering a trend towards increased GHG output and rising world temperatures, it cannot ignore the real factors behind GHG emissions.

The Fuel Standard does not isolate California and protect its producers from competition. To date, the lowest ethanol carbon intensity values, providing the most beneficial market position, have been for pathways from the Midwest and Brazil. *See* Cal.Code Regs. tit. 17, § 95486(b)(1). Comparing all sources of ethanol and all factors that contribute to the carbon intensity of an ethanol pathway, it appears that CARB's method of lifecycle analysis treats ethanol the same regardless of origin, showing a nondiscriminatory reason for the unequal results of this analysis. Yet Plaintiffs contend (1) that certain factors in the CA-GREET analysis are inherently discriminatory against out-of-state ethanol and (2) that the regional categories and default

pathways shown in Table 6 discriminate against out-of-state ethanol based on origin. We address these arguments at more length, as they are the crux of the challenges by Rocky Mountain and American Fuels to CARB's regulatory scheme.

iii

The district court held that two of the CA-GREET factors, transportation and electricity source, were “inextricably intertwined with origin” and that CARB's use of those factors was impermissible under the dormant Commerce Clause. *Rocky Mountain Ethanol*, 843 F.Supp.2d at 1088-89. To reach this conclusion, the district court reasoned first that any factor correlated with origin is “inextricably intertwined with geography” and second that any otherwise neutral factor becomes discriminatory if it is intertwined with geography, even if that factor measures real variations in emissions from different methods and locations of ethanol production. This reasoning is incorrect.

As explained above, these factors bear on the reality of GHG emissions, with resulting consequences for California.⁸ Unless and until either the United States

⁸ There is growing scientific and public consensus that the climate is warming and that this warming is to some degree caused by anthropogenic GHG emissions. See EPA, Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act (“Endangerment Finding”), 74 Fed.Reg. 66496, 66499 (December 15, 2009) (finding that “emissions of well-mixed greenhouse gases . . . contribute to the total greenhouse gas air pollution, and thus to the climate change problem, which is reasonably anticipated to endanger public health and welfare”); see *Coal. for Responsible Regulation, Inc. v. EPA*, 684 F.3d 102, 114 (D.C.Cir.2012) (upholding the Endangerment Finding); Intergovernmental Panel on Climate Change, Climate Change 2007: Synthesis Report, Summary of

Supreme Court or the Congress forbids it, California is entitled to proceed on the understanding that global warming is being induced by rising carbon emissions and attempt to change that trend. California, if it is to have any chance to curtail GHG emissions, must be able to consider all factors that cause those emissions when it assesses alternative fuels.

Plaintiffs contend that any consideration of emissions from the transportation of feedstocks and fuels is forbidden. They cite *Fort Gratiot Sanitary Landfill, Inc. v. Michigan Department of Natural Resources*, 504 U.S. 353, 112 S.Ct. 2019, 119 L.Ed.2d 139 (1992), and *Dean Milk Co. v. City of Madison*, 340 U.S. 349, 71 S.Ct. 295, 95 L.Ed. 329 (1951), but neither case stands for that proposition. In *Fort Gratiot*, a Michigan law allowed each county to refuse solid waste from another county, state, or country. 504 U.S. at 357, 112 S.Ct. 2019. The Court held that the statute discriminated against interstate commerce by authorizing each county to isolate itself from the national economy, “afford[ing] local waste producers complete protection from out-of-state waste.” *Id.* at 361, 112 S.Ct. 2019. Michigan argued that the law did not discriminate because the county was also authorized to isolate itself from the rest of the state, but the Court explained that a state “may not avoid the strictures of the Commerce Clause by curtailing the movement of articles of commerce through subdivisions of the State, rather than through the State itself.” *Id.* In *Dean Milk*, the Court struck down a Madison, Wisconsin, ordinance that prohibited the sale of milk unless the milk was bottled within five miles of the town central square.

Policymakers 2 & 5 (2007) (explaining that “[w]armin[ing] of the climate system is unequivocal” and “very likely due to the observed increase in anthropogenic GHG concentrations”).

340 U.S. at 350, 71 S.Ct. 295. The Court held that the regulation had the practical effect of “exclud[ing] from distribution in Madison wholesome milk produced and pasteurized in Illinois.” *Id.* at 354, 71 S.Ct. 295. That Madison also excluded milk from Milwaukee was irrelevant. In both of these cases, the Supreme Court found discrimination based on the communities’ decision to isolate themselves and direct business to local processors, not based on the use of distance for sound reasons correlating with the purposes of the regulation.

CARB’s attention to emissions from transportation has no such isolating effect. We “view[] with particular suspicion state statutes requiring business operations to be performed in the home State that could more efficiently be performed elsewhere.” *Pike*, 397 U.S. at 145, 90 S.Ct. 844. But transporting raw corn produces more emissions than importing refined ethanol, driving up a fuel pathway’s carbon intensity and making local processing less attractive. This is not a form of discrimination against out-of-state producers. Even if California were to someday produce significant amounts of corn for ethanol, the CA-GREET transportation factor would remain non-discriminatory to the extent it applies evenly to all pathways and measures real differences in the harmful effects of ethanol production. *See Or. Waste Sys., Inc.*, 511 U.S. at 101 n. 5, 114 S.Ct. 1345.

Plaintiffs also contend that the carbon intensity of electricity is “inextricably intertwined with geography.” California’s mix of electricity generation is weighted toward lower-carbon sources such as natural gas, nuclear, and hydroelectric, and California ethanol producers pay more for electricity with fewer emissions than the national average. By contrast,

Midwest producers have largely located their plants near cheap and carbon-intensive sources of coal-fired electricity generation. The default pathways reflect the resulting difference in the average carbon intensity of electricity available in the region where producers are located. *See* Table 6.

But ethanol producers in the Midwest are not hostage to these regional electricity-generating portfolios. Many ethanol plants in the Midwest generate some or all of their own electricity and use the waste heat as a source of thermal energy, reducing emissions. *See* 75 Fed.Reg. at 14745. Drawing electricity from the coal-fired grid might be the easiest and cheapest way to power an ethanol plant. But the dormant Commerce Clause does not guarantee that ethanol producers may compete on the terms they find most convenient. *See Exxon Corp. v. Governor of Md.*, 437 U.S. 117, 127, 98 S.Ct. 2207, 57 L.Ed.2d 91 (1978) (holding that the Commerce Clause does not protect “the particular structure or methods of operation in a retail market”). The Fuel Standard treats the electricity used by all producers the same way based on the real risks posed by different sources of generation. As with transportation, this is not a dormant Commerce Clause violation, even if the extent and carbon intensity of power on an electrical grid is related to the location of the grid.

Addressing both of these factors, American Fuels contends that by allocating credits in part based on emissions from transportation and electricity generation, the Fuel Standard “stri[ps] away from the [out-of-state] industry the competitive and economic advantages it has earned for itself.” *See Hunt v. Wash. State Apple Adver. Comm’n*, 432 U.S. 333, 351, 97 S.Ct. 2434, 53 L.Ed.2d 383 (1977). This “artificially

encourage[es] instate production even when the same goods could be produced at lower cost in other States.” *W. Lynn Creamery, Inc. v. Healy*, 512 U.S. 186, 193, 114 S.Ct. 2205, 129 L.Ed.2d 157 (1994). American Fuels reads these cases too broadly and understands “cost” too narrowly.

In *Hunt*, the Court invalidated a North Carolina statute requiring that all apples shipped into the state in closed containers be labeled only with the applicable federal grade or standard of quality. 432 U.S. at 335, 97 S.Ct. 2434. This affected Washington State apple growers, who had funded a program to inspect and grade apples for export. *Id.* at 336-38, 97 S.Ct. 2434. Consumers and brokers across the country had come to prefer the Washington grades to USDA grades. *Id.* at 351, 97 S.Ct. 2434. The Court held that the North Carolina statute discriminated against Washington apple growers because it “strip[ped] away from the Washington apple industry the competitive and economic advantages it ha[d] earned for itself through its expensive inspection and grading system.” *Id.* at 351, 97 S.Ct. 2434. According to American Fuels, Midwest ethanol producers earned a similar protected advantage for themselves by building facilities near corn feedstocks and cheap, coal-generated electricity.

To the extent American Fuels relies on Midwest producers’ proximity to feedstocks, their comparison makes no sense. The Fuel Standard does not strip away but magnifies this advantage by measuring the significant emissions caused by transporting raw corn to California. Midwest producers’ use of coal-fired electricity also does not merit respect under *Hunt*. Access to cheap electricity is an advantage, but it was not “earned” in the sense meant by *Hunt* simply because ethanol producers built their plants near coal-

fired power plants and imposed the hidden costs of GHG emissions on others. If *Hunt* is relevant, it is because the lowcarbon electricity generated in-house by some Midwest producers was expensively acquired and provides real benefits, valued by ethanol consumers, that can only be recognized through lifecycle analysis.

The Fuel Standard does not “artificially encourag[e] in-state production even when the same goods could be produced at lower cost in other States.” See *W. Lynn Creamery*, 512 U.S. at 193, 114 S.Ct. 2205. It creates a market in which the monetary cost of ethanol better reflects the full costs of ethanol production, taking into account the harms from GHG emissions. After accounting for those costs, Midwest ethanol has attained both the highest and the lowest carbon intensity values, and Brazilian ethanol boasts the default pathway with the lowest carbon intensity. The dormant Commerce Clause does not require California to ignore the real differences in carbon intensity among out-of-state ethanol pathways, giving preferential treatment to those with a higher carbon intensity. These factors are not discriminatory because they reflect the reality of assessing and attempting to limit GHG emissions from ethanol production.

We conclude: (1) that all sources of ethanol compete in the California market and are therefore relevant to comparison; (2) that all of the factors included in CAGREET’s lifecycle analysis are relevant to determining which forms of ethanol are similarly situated—not just those factors that are uncorrelated with location; (3) that the CA-GREET lifecycle analysis used by CARB, including the specific factors to which Plaintiffs object, does not discriminate against out-of-state commerce. We next address Plaintiffs’ challenge

to the regional categories and average values that form the default pathways in Table 6.

iv

With Table 6, CARB provides a schedule of default pathways that regulated parties can use to meet the Fuel Standard's reporting requirements. Cal.Code Regs. tit. 17, § 95486(b)(1). As described, those default pathways are based on average values for each CA-GREET factor, and some of those factors are correlated with location. For those, CARB aggregates producers within California, the Midwest, and Brazil to measure average values. On Table 6, CARB lists each pathway with its regional identifier rather than separately listing each factor that is correlated with origin. *Compare* Appendix One, *with* Appendix Two. Each source of ethanol may rely on a default pathway that incorporates average values for producers within its region that use the same mechanical methods and thermal-energy source and produce the same co-product.

Plaintiffs contend that CARB treats Midwest and California ethanol differently based solely on origin by using different regions to categorize and measure averages for its default pathways. This challenge presents two related questions, which we will consider in turn: (1) whether CARB treats all the default pathways the same within each regional category and (2) whether CARB discriminated against out-of-state ethanol by constructing the categories with reference to California's border. We first conclude that CARB treats all ethanol within each regional category the same.

CARB designed the default pathways to be appropriate for use by multiple ethanol producers, avoiding

costly and unnecessary individualized determinations. Under this system, only those producers with a lower-than-average carbon intensity need apply for an individualized value. To be broadly suitable, the carbon intensity values in the default pathways are averages. Being averages, they cannot exactly match the individual carbon intensity values of every ethanol source that may rely on them. Not every ton of distillers' grains will require the same amount of heat to dry, and not every (probably no single) plant will be exactly as efficient as the category average. The district court concluded correctly that "California applies the same CA-GREET formula to all pathways evenly." *Rocky Mountain Ethanol*, 843 F.Supp. at 1087. As a result, the effects of any inaccuracies in the categories will fall evenly on the various default pathways.

Some producers may be burdened by this system to the extent that their fuels have carbon intensities below the relevant default pathway. For those, whether a California producer that uses solar power or a Midwest producer that co-generates heat and electricity, the Fuel Standard allows an individualized assessment to obtain an individual carbon intensity value, wherever the producer is located. Plaintiffs contend that this system treats the regional categories unevenly, notwithstanding the opportunity to seek individualized values. They explain that Methods 2A and 2B are themselves discriminatory because a Midwest ethanol producer must undertake a burdensome process to qualify for the same carbon intensity value that a California producer using the same "nominal production process" may access through a

default pathway.⁹ With this argument, Plaintiffs make the same mistake the district court did when limiting its comparison of fuel pathways: asserting that emissions from transportation, electricity generation, and plant energy use do not count. Different ethanol pathways are entitled to equal treatment by CARB, but no ethanol producer is entitled to a particular carbon intensity value simply because another producer, using some but not all of the same processes and resources, qualifies for a default pathway with that value.

CARB gives the same treatment to each regional category, and it requires the same showing from anyone who seeks an individualized value under Methods 2A and 2B. Parties from all three regions have registered individualized pathways, showing that the categories do not uniformly benefit California producers. Cal.Code Regs. tit. 17, § 95486(b). Although this scheme will burden certain Midwest producers and benefit certain California producers, the reverse is also true. These burdens and benefits are attributable to the imprecision of averages rather than to discrimination. We conclude that CARB gives ethanol producers in each regional category “the substantially evenhanded treatment demanded by the Commerce Clause.” *Bos. Stock Exch. v. State Tax Comm’n*, 429 U.S. 318, 332, 97 S.Ct. 599, 50 L.Ed.2d 514 (1977).

The question, then, is whether CARB’s decision to draw one of the regional categories along its boundary was facially discriminatory. We conclude it was not. The Fuel Standard is novel in some ways, but it is not the first time that a state has faced harms from

⁹ Plaintiffs use “nominal process” the same way the district court used “production process”—to refer only to those CA-GREET factors not correlated with origin.

products made in its sister states, and it is not the first time that a state has defined categories for purposes of regulation with reference to state boundaries. *See, e.g., Henneford v. Silas Mason Co.*, 300 U.S. 577, 584, 57 S.Ct. 524, 81 L.Ed. 814 (1937) (upholding a tax applied to out-of-state articles when “the stranger from afar is subject to no greater burdens . . . than the dweller within the gates”). States retain substantial regulatory authority, and the states have varied physical conditions. These differences reflect and cause differences in the carbon intensities of fuels produced within their borders. As noted, the Fuel Standard’s categories cannot perfectly reflect every individual value. But “[p]erfection in making the necessary classification is neither possible nor necessary.” *Mass. Bd. of Ret. v. Murgia*, 427 U.S. 307, 314, 96 S.Ct. 2562, 49 L.Ed.2d 520 (1976) (citation omitted). To call for individualized carbon intensity assessments in each case, rather than default pathways, would increase the costs of compliance with California’s system and render it cumbersome.

The Fuel Standard’s categories, though formed with reference to state boundaries, must treat ethanol from all sources evenhandedly. Like lifecycle analysis itself, they must show “some reason, apart from their origin,” for their alignment. *Philadelphia*, 437 U.S. at 627, 98 S.Ct. 2531. In *Chemical Waste*, the Court explained that a regulation setting its boundaries along state lines would not be considered a forbidden protectionist measure when its boundaries and the process setting them reflected genuine attention to the legitimate goals of regulation and not a mere hostility to trade. *Chem. Waste*, 504 U.S. at 347 & n. 11, 112 S.Ct. 2009 (citing *Or.-Wash. R.R. & Nav. Co. v. Washington (Oregon-Washington)*, 270 U.S. 87, 96, 46 S.Ct. 279, 70 L.Ed. 482 (1926)).

As a basis for its holding in *Chemical Waste*, the Court cited *Oregon-Washington*, an older case rejecting a dormant Commerce Clause challenge to a Washington State regulation that blocked shipments of alfalfa, except in sealed containers, from neighboring states whose fields had been infested with alfalfa weevils. 270 U.S. at 87, 46 S.Ct. 279.¹⁰ To set the boundaries of this quarantine, the Washington Director of Agriculture “investigated thoroughly the insect and the areas where such pests existed, and ascertained it to be in the whole of the state of Utah” and large portions of Idaho, Wyoming, Colorado, Oregon, and Nevada. *Id.* at 91, 46 S.Ct. 279. The Court held that the dormant Commerce Clause did not prohibit the regulation because “the investigation required by the Washington law and the investigation actually made into the existence of this pest and its geographical location ma[de] the law a real quarantine law and not a mere inhibition against importation of alfalfa from a large part of the country without regard to the condition which might make its importation dangerous.” *Id.* at 96, 46 S.Ct. 279.

The default pathways in Table 6 show that CARB’s investigation in setting the bounds of the Fuel Standard’s regional categories was more rigorous and that those categories are less burdensome to interstate commerce than the regulation in *Oregon-Washington*. Both regulations balance the desire for a precise assessment with the need to reduce the compliance costs of the system. Neither completely eliminated trade in the covered article. A system of individual

¹⁰ After rejecting the dormant Commerce Clause challenge, the Supreme Court invalidated the regulation because it conflicted with the Agricultural Appropriation Act of 1917. *Oregon-Washington*, 270 U.S. at 96-97, 46 S.Ct. 279.

inspection was considered unreasonably costly when it involved “the tearing open of every bale of hay and sack of meal,” *id.* at 90, 46 S.Ct. 279, just as CARB judged universal individualized pathways to be unwarranted when many fuel producers prefer to rely on measured averages, *see, e.g.*, FSOR 113, 116, 117 (requesting that CARB issue more default pathways). Both regulations could provide an in-state entity with an unearned benefit: some California ethanol has an individual carbon intensity higher than its applicable default pathway; in *Oregon-Washington*, Washington was not entirely free of weevils, the weevils just were not “generally distributed.” 270 U.S. at 90, 46 S.Ct. 279. And out-of-state entities faced some undeserved harms: the weevil quarantine applied to entire states, which almost certainly included individual fields that were not afflicted. Likewise, some Midwest ethanol will have a carbon intensity lower than its applicable default pathway. But unlike the Fuel Standard, Washington allowed no in-state producer to suffer an unwarranted burden and gave no out-of-state farm an unearned benefit. Moreover, Washington provided no alternative mechanism for individual inspection. By contrast, the default pathways give symmetrical burdens and benefits, and the Fuel Standard allows for individual determinations under Methods 2A and 2B.

The Fuel Standard’s regional categories for the default pathways show every sign that they were chosen to accurately measure and control GHGs and were not an attempt to protect California ethanol producers. For example, the two factors that the district court found were inextricably intertwined with origin support CARB’s decision to set the boundaries of the regional categories as it did. Looking first at transportation emissions, we see that as of June 2011,

there were no registered producers of corn ethanol from any state neighboring California. There was one in Idaho. Otherwise, every producer was located either in California, East of the Rocky Mountains, or in Brazil. Corn and ethanol from the Midwest must cross those mountains to reach California, raising emissions from transport and aggravating the difference between shipping raw corn and refined ethanol. This difference is enough to make transportation emissions for California even higher than those for Brazil, showing that it would make little sense to group California and the Midwest together. The three regions are distinct from each other, and within each region conditions are similar for each producer located there. From the perspective of transportation emissions, CARB's decision to align the regional categories as it did produced accurate carbon intensity values. This is the type of expert regulatory judgment that we expect state agencies to make in the public interest.

The regional electricity supplies provide a second nondiscriminatory reason for CARB's decision. As described, California's mix of electricity has a low carbon intensity, very different from the national average. This difference is likely to grow because California has instituted several measures to further decarbonize its electricity supply.¹¹ Brazil's power grid

¹¹ The California Renewable Portfolio Standard ("RPS") requires that renewable sources account for 20% of California electricity by 2011 and 33% by December 31, 2020. Cal. Pub. Util. Code § 399.15(b)(2)(B). In the benchmark years of 2010 and 2020, this is the highest RPS in the United States. *See* United States Department of Energy Database of State Incentives for Renewables and Efficiency ("DSIRE"), DSIRE RPS Data Spreadsheet (Mar. 2013), *available at* <http://www.dsireusa.org/rpsdata/RPSspread031813.xlsx>. California's cap and trade law limits overall GHG emissions from electricity generators and importers,

is almost entirely hydroelectric, giving it an even lower carbon intensity than California's. These differences in electricity directly affect the goods produced with that electricity, so as the GHG emissions from California's electricity supply continue to decline, the difference in emissions attributable to ethanol made with electricity from California and the Midwest will grow. As with transportation, drawing the regional categories otherwise might only make CARB's assessment less accurate to the detriment of the public.

The default pathways listed on Table 6 do categorize fuels by their origin, but the carbon intensity values on that table are not assigned based on the out-of-state character of fuels. Rather, the Fuel Standard uses these regional categories to calculate accurate and broadly applicable carbon intensity values in a way convenient for regulated parties. Recognizing that its default pathways might misrepresent some fuel producers, CARB gave a safety valve to permit individualized assessment. The district court concluded that "the carbon intensities of [California and Midwest Ethanol] are different according to lifecycle analysis." *Rocky Mountain Ethanol*, 843 F.Supp.2d at 1087-88. Given that difference, equal treatment of diverse fuels cannot result in equal carbon intensity values. Artificially equalized values would neither accurately reflect real differences in carbon intensity nor allow California to protect its land and citizens based on a realistic assessment of threats.

Just as a state law need not "be drafted explicitly along state lines in order to demonstrate its discriminatory design," *Amerada Hess Corp. v. N.J.*

whatever the source of generation. Cal.Code Regs. tit. 17, § 95811(b).

Dep't of Treasury, 490 U.S. 66, 76, 109 S.Ct. 1617, 104 L.Ed.2d 58 (1989), California's reasonable decision to use regional categories in its default pathways and in the text of Table 6 does not transform its evenhanded treatment of fuels based on their carbon intensities into forbidden discrimination. That decision does not empower out-of-state ethanol producers to eliminate the factors of lifecycle analysis that do not favor them while keeping those that do. We hold that CARB's use of categories in Table 6 does not facially discriminate against out-of-state ethanol.

Our conclusion is reinforced by the grave need in this context for state experimentation. Congress of course can act at any time to displace state laws that seek to regulate the carbon intensity of fuels, but Congress has expressly empowered California to take a leadership role as to air quality. If GHG emissions continue to increase, California may see its coastline crumble under rising seas, its labor force imperiled by rising temperatures, and its farms devastated by severe droughts. To be effective, California's effort to combat these harms must not be so complicated and costly as to be unworkable. California's regulatory experiment seeking to decrease GHG emissions and create a market that recognizes the harmful costs of products with a high carbon intensity does not facially discriminate against out-of-state ethanol.

B

The district court concluded that the 2011 Provisions treated crude oil in a facially neutral manner but that these facially neutral provisions, taken as a whole, showed that the 2011 Provisions discriminated against out-of-state crude oil in purpose and effect. *Rocky Mountain Crude*, 2011 WL 6939368, at *13; see

W. Lynn Creamery, 512 U.S. at 201, 114 S.Ct. 2205. We disagree.¹²

“If a state law purporting to promote environmental purposes is in reality simple economic protectionism, we have applied a virtually *per se* rule of invalidity.” *Minnesota v. Clover Leaf Creamery Co.*, 449 U.S. 456, 471, 101 S.Ct. 715, 66 L.Ed.2d 659 (1981) (internal quotation marks removed). The party challenging a regulation bears the burden of establishing that a challenged statute has a discriminatory purpose or effect under the Commerce Clause. *Hughes v. Oklahoma*, 441 U.S. 322, 336, 99 S.Ct. 1727, 60 L.Ed.2d 250 (1979). We will “assume that the objectives articulated by the legislature are actual purposes of the statute, unless an examination of the circumstances forces us to conclude that they could not have been a goal of the legislation.” *Clover Leaf Creamery*, 449 U.S. at 463 n. 7, 101 S.Ct. 715 (internal

¹² Although the 2011 Provisions have been amended, this does not render the challenge to them moot. “A case becomes moot only when it is impossible for a court to grant any effectual relief whatever to the prevailing party.” *Decker v. Nw. Envtl. Def. Ctr.*, —U.S.—, 133 S.Ct. 1326, 1335, 185 L.Ed.2d 447 (2013) (quotation marks and citation omitted). Here, the 2011 Provisions applied to crude oil delivered through December 31, 2011, so one year of Fuel Standard credits were allocated based on the distinction between emerging and existing sources and between HCICOs and non-HCICOs. Advisory 13-01 altered the treatment of Potential HCICOs to conform to the amended provisions, but sellers of verified HCICOs could have reported individual carbon intensity values during 2011. Credits awarded based on those values will carry forward to subsequent years and may be used by a regulated party to comply with the Fuel Standard mandates. Cal.Code Regs. tit. 17, §§ 95484(b), (c)(4), 95485(c). The propriety of the scheme under which those credits were distributed remains a live controversy.

quotation marks omitted). But we will not be bound by the stated purpose when determining the practical effect of a law. *Hughes*, 441 U.S. at 336, 99 S.Ct. 1727.

Under the 2011 Provisions, CARB assessed a crude-oil pathway's carbon intensity based on two factors: (1) whether it was an HCICO and (2) whether it was an "emerging" or an "existing" source. If a crude oil was an HCICO (having a carbon intensity greater than 15 gCO₂e/MJ) and not an existing source (comprising more than two percent of California's market in 2006), then it was assessed its individual carbon intensity. All other crude oils used the 2006 baseline average of 8.07 gCO₂e/MJ. California TEOR was the only existing source that was also an HCICO. It used the baseline carbon intensity, which was less than half of its individual value. *See Rocky Mountain Crude*, 2011 WL 6936368, at *12. No out-of-state HCICO qualified for this treatment. *Id.* at *11-12. The district court concluded that the purpose and practical effect of the 2011 Provisions was to protect California TEOR against competition from both foreign HCICOs and out-of-state existing crude sources. *Id.* at *12.

CARB explains that its purposes in designing the 2011 Provisions were: (1) to prevent an increase in the carbon intensity of California's crude oil market; (2) to avoid fuel shuffling; and (3) to direct innovation toward the development of alternative fuels rather than the search for more efficient methods of crude-oil extraction. The distinction between HCICOs and non-HCICOs was intended to prevent an increase in carbon intensity, and the distinction between emerging and existing sources was designed to prevent fuel shuffling. By placing a floor for assessed carbon intensity at the average of California's 2006 market, CARB intended to direct development efforts toward

alternative fuels by denying rewards for marginal decreases in emissions from crude-oil production.

The district court concluded that these asserted motivations disguised a discriminatory purpose based on the “[Fuel Standard’s] favorable treatment of California’s TEOR as compared to other HCICOs and other existing crude sources.” *Rocky Mountain Crude*, 2011 WL 6936368, at *13. To illustrate the effect of these distinctions, the district court included two tables that showed some of the crude oils in the California market and compared their assessed carbon intensities with their individual carbon intensities. The first of these tables compared California TEOR to Venezuela Heavy, a foreign HCICO. *Id.* at *11 n. 5.

	% of 2006 Market	Carbon Intensity	Assigned Carbon Intensity	Variance
California TEOR	14.8	18.89	8.07	-10.82
Venezuela Heavy	0.063	21.95	21.95	—

Venezuela Heavy contributed a trivial amount of oil to the 2006 California market, so it was not an existing source under the 2011 Provisions. Because it was an HCICO, Venezuela Heavy was assessed its individual carbon intensity in 2011.

The second table compared California TEOR with Alaskan and foreign light crudes, both non-HCICOs. *Id.* at *12 n. 6. These light crudes were existing sources and non-HCICO’s, so they were assessed the 2006 average, which was higher than their individual carbon intensities.

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	% of 2006 Market	Carbon Intensity	Assigned Carbon Intensity	Variance
CA TEOR	14.8	18.89	8.07	-10.82
Alaska Light	14.8	4.36	8.07	+3.71
Imported Light	44.4	4.65	8.07	+3.42

As shown in these tables, California TEOR was treated favorably compared to out-of-state sources based on a comparison of a fuel's individual carbon intensity to its assigned carbon intensity. California TEOR also benefited compared to Venezuela Heavy from CARB's choice to define "existing sources" at two percent of the 2006 market.

But these tables left out several significant parts of the 2006 market. The remainder—almost one quarter of the market—alters the impression of the 2011 Provisions. Left out were three California non-HCICOs with individual carbon intensities ranging from 4.31 to 12.75. We include another table that shows the full California crude-oil market in 2006.

	% of 2006 Market	Carbon Intensity	Assigned Carbon Intensity	Variance
CA TEOR	14.8	18.89	8.07	-10.82
Gas Injection	1.3	12.75	8.07	-4.68
Water Flood	6.10	5.57	8.07	+2.50
California Primary	16.5	4.31	8.07	+3.76
Alaska Light	14.8	4.36	8.07	+3.71

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Imported	44.4	4.65	8.07	+3.42
Light				
Venezuela	0.063	21.95	21.95	—
Heavy				

Seen in context of the full market, the 2011 Provisions do not appear protectionist, though they do assess California TEOR a carbon intensity well below its individual value. California TEOR benefited from an assessed carbon intensity lower than its individual carbon intensity. But California Primary has the lowest individual carbon intensity in the market; it suffered more from the same arrangement than light crude from Alaska or abroad. Under the 2011 Provisions, California Primary and Water Flood were both assessed carbon intensity values higher than their individual values. Those burdened sources together made up 22.6% of the 2006 market; the benefited California sources formed only 16.1%. This burden on “major in-state interests . . . is a powerful safeguard against legislative abuse.” *W. Lynn Creamery, Inc.*, 512 U.S. at 200, 114 S.Ct. 2205 (quoting *Clover Leaf Creamery Co.*, 449 U.S. at 473 n. 17, 101 S.Ct. 715).

American Fuels contends that this comparatively unfavorable treatment to California Primary and Water Flood is irrelevant, arguing that a state law that discriminates against interstate and foreign commerce is no less discriminatory because it may burden some in-state competitors as well. *See C & A Carbone, Inc. v. Town of Clarkstown*, 511 U.S. 383, 391, 114 S.Ct. 1677, 128 L.Ed.2d 399 (1994) (invalidating local-processing ordinance that burdened both out-of-town and out-of-state processors); *Fort Gratiot*, 504 U.S. at 353, 112 S.Ct. 2019 (striking down ordinance that banned out-of-county waste in county landfills);

Dean Milk, 340 U.S. at 349, 71 S.Ct. 295 (striking down ordinance that required milk to be processed within five miles of Madison, Wisconsin).

These cases are not applicable to the challenge here. As we noted in section III(A)(iii) above, they struck down local-processing requirements that privileged local entities over both state-wide and out-of-state interests. Where the challenged laws in those cases benefited peculiarly local concerns, the 2011 Provisions burdened and benefited in-state industries at the state level, and there is no reason to believe that CARB preferred California TEOR to California Primary. A similar case, *Bacchus Imports*, is also distinguishable. There, Hawaii exempted beverages produced exclusively within the state from its excise tax but did not provide the same treatment to other beverages made both in and out of state. 468 U.S. at 265-66, 104 S.Ct. 3049. The legislature exempted the favored beverages with the explicit purpose of “encourag[ing] development of the Hawaiian liquor industry.” *Id.* at 265, 104 S.Ct. 3049. No equivalent statement is present here.¹³ Leaving aside that explicit statement, Hawaii chose to support a uniquely local industry at the expense of one in which it held no particular advantage. There is no comparable distinction between California TEOR and Primary. We conclude that CARB’s stated purpose was genuine. There was no protectionist purpose, no aim to insulate California firms from out-of-state competition.

¹³ American Fuels has pulled a few quotes from an expansive record that it contends show CARB’s discriminatory purpose. These do not plausibly relate to a discriminatory design and are “easily understood, in context, as economic defense of a [regulation] genuinely proposed for environmental reasons.” *Clover Leaf Creamery*, 449 U.S. at 463 n. 7, 101 S.Ct. 715.

Having found a protectionist purpose, which we conclude was incorrect, the district court did not discuss evidence of an actual adverse effect created by the 2011 Provisions, though the district court did hold that the crude-oil provisions in design and practical effect favored California HCICO and discriminated against foreign HCICOs and out-of-state and foreign existing crude sources. When challenged by CARB to present such evidence in its brief, American Fuels instead relied on its claim that the 2011 Provisions had a discriminatory purpose, asking us “to speculate and to infer that this scheme necessarily has the effect it fears.” *Black Star Farms LLC*, 600 F.3d at 1232. In cases such as this, where neither facial discrimination nor an improper purpose has been shown, the evidentiary burden to show a discriminatory effect is particularly high. *Id.* American Fuels has not presented the “substantial evidence of an actual discriminatory effect” necessary “in order to take advantage of heightened scrutiny and shift the burden of proof to the State.” *Id.* at 1233 (quoting *Black Star Farms, LLC v. Oliver*, 544 F.Supp.2d 913, 928 (D.Ariz.2008)). We reverse the district court’s conclusion that the 2011 Provisions discriminated against out-of-state crude oil in practical effect, and we remand for the district court to consider whether the 2011 Provisions placed an undue burden on interstate commerce under *Pike*.

IV

In addition to discrimination based on origin, the dormant Commerce Clause holds that any “statute that directly controls commerce occurring wholly outside the boundaries of a State exceeds the inherent limits of the enacting State’s authority.” *Healy v. Beer Inst.*, 491 U.S. 324, 336, 109 S.Ct. 2491, 105 L.Ed.2d

275 (1989). Under *Healy*, the “critical inquiry is whether the practical effect of the regulation is to control conduct beyond the boundary of the state.” *Id.* (citing *Brown-Forman Distillers Corp. v. N.Y. State Liquor Auth.*, 476 U.S. 573, 579, 106 S.Ct. 2080, 90 L.Ed.2d 552 (1986)). To determine the practical effect of the regulation, we consider not only the direct consequences of the statute itself, but also “how the challenged statute may interact with the legitimate regulatory regimes of other States and what effect would arise if not one, but many or every, State adopted similar legislation.” *Id.*

The district court held that the Fuel Standard regulated extraterritorial conduct because: (1) by treating fuels based on lifecycle emissions, it “attempts to control” out-of-state conduct, *Rocky Mountain Ethanol*, 843 F.Supp.2d at 1091 (internal quotation marks omitted); (2) California’s attempt to take “legal and political responsibility” for worldwide carbon emissions caused by transportation fuels used in California was an improper extension of California’s police power to other states, *id.* at 1091-92; (3) the Fuel Standard regulates the channels of interstate commerce by compelling producers to submit changes in their transportation routes to CARB to qualify for an altered pathway, *id.* at 1092; and (4) if each state enacted a regulation similar to the Fuel Standard, it would result in economic Balkanization. *Id.* at 1092-93. We disagree. The Fuel Standard regulates only the California market. Firms in any location may elect to respond to the incentives provided by the Fuel Standard if they wish to gain market share in California, but no firm must meet a particular carbon intensity standard, and no jurisdiction need adopt a particular regulatory standard for its producers to gain access to California.

In the modern era, the Supreme Court has rarely held that statutes violate the extraterritoriality doctrine. The two most prominent cases where a violation did occur both involved similar price-affirmation statutes. In *Brown-Forman*, New York required distillers to file schedules of prices each month and barred them from selling liquor in other states for prices below those filed. 476 U.S. at 575-76, 106 S.Ct. 2080. New York enforced this bar with the threat of revocation of the distiller's license and forfeiture of a bond. *Id.* at 576, 106 S.Ct. 2080. Holding that such statutes "regulate[] out-of-state transactions in violation of the Commerce Clause," the Court explained that "[f]orcing a merchant to seek regulatory approval in one State before undertaking a transaction in another directly regulates interstate commerce." *Id.* at 582, 106 S.Ct. 2080.

Soon after, the Court invalidated a similar statute that required beer distributors to affirm under oath that the prices they filed in Connecticut were as low as any they charged in neighboring states. *Healy*, 491 U.S. at 328, 109 S.Ct. 2491. This conspired with laws in other states to prevent brewers from pricing products independently in neighboring states, so the Court concluded that the law "create[d] just the kind of competing and interlocking local economic regulation that the Commerce Clause was meant to preclude." *Healy*, 491 U.S. at 337, 109 S.Ct. 2491.

These price-affirmation decisions relied on two earlier cases. The first was *Baldwin v. G.A.F. Seelig, Inc.*, a Depression-era case that enforced limits on a state's ability to control prices outside its borders. 294 U.S. 511, 55 S.Ct. 497, 79 L.Ed. 1032 (1935). In *Baldwin*, New York extended its minimum milk prices

beyond its borders by forbidding the sale in New York of milk that was purchased outside the state at a price below the minimum. *Id.* at 519, 55 S.Ct. 497. Writing for the Court, Justice Cardozo observed that “New York has no power to project its legislation into Vermont by regulating the price to be paid in that state for milk acquired there.” *Id.* at 521, 55 S.Ct. 497. He explained, however, that New York could ensure the purity of its milk supply by requiring dairy farmers to maintain certificates showing compliance with health safeguards. *Id.* at 524, 55 S.Ct. 497.

The second was *Edgar v. MITE Corp.*, in which Illinois required companies with certain minimal ties to Illinois to submit all tender offers for approval by Illinois officials, even when the offers were made by a foreign company to shareholders entirely outside of state. 457 U.S. 624, 642, 102 S.Ct. 2629, 73 L.Ed.2d 269 (1982). An unapproved tender offer between out-of-state entities could give rise to civil penalties and criminal prosecution. *Id.* at 630 n. 5, 102 S.Ct. 2629. To the Court, this imposed an unjustified burden on interstate commerce. *Id.* at 643, 102 S.Ct. 2629 (citing *Pike*, 397 U.S. at 142, 90 S.Ct. 844). A plurality also concluded that the law “ha[d] a sweeping extraterritorial effect” because it applied to transactions that “would not affect a single Illinois shareholder.” *Id.* at 642, 102 S.Ct. 2629.

Courts have extended the rule from *Healy* and *Brown-Forman* to cases where the “price” floor being imposed on another jurisdiction was not monetary but rather a minimum standard of environmental protection. Plaintiffs contend that the Fuel Standard is forbidden by the Supreme Court’s statement in *Carbone* that “[s]tates and localities may not attach restrictions to exports or imports in order to control

commerce in other States.” 511 U.S. at 393, 114 S.Ct. 1677 (citing *Baldwin*, 294 U.S. at 511, 55 S.Ct. 497). In *Carbone*, the Court invalidated a flow-control ordinance that required waste to be processed at the town’s privately operated transfer station. *Id.* at 386-87, 114 S.Ct. 1677. The *Carbone* Court based its decision on a finding of facial discrimination, but it explained in the alternative that the town could not justify the ordinance as “a way to steer solid waste away from out-of-town disposal sites that it might deem harmful to the environment. To do so would extend the town’s police power beyond its jurisdictional bounds.” *Id.* at 393, 114 S.Ct. 1677. Soon after, the Seventh Circuit addressed a similar but inverted regulation, striking down a Wisconsin statute that conditioned imports of waste on the exporting jurisdiction’s adoption of Wisconsin’s recycling standards. *Nat’l Solid Wastes Mgmt. Ass’n v. Meyer*, 63 F.3d 652, 653-54 (7th Cir.1995). Because the statute sought to impose Wisconsin’s standards on another jurisdiction rather than just regulate the effects of waste brought into Wisconsin, the Seventh Circuit concluded that the statute mandated that “all persons in that non-Wisconsin community must adhere to the Wisconsin standards whether or not they dump their waste in Wisconsin.” *Id.* at 658. This was the kind of regulatory control forbidden by *Carbone*. See 511 U.S. at 393, 114 S.Ct. 1677.

The Fuel Standard imposes no analogous conditions on the importation of ethanol. It says nothing at all about ethanol produced, sold, and used outside California, it does not require other jurisdictions to adopt reciprocal standards before their ethanol can be sold in California, it makes no effort to ensure the price of ethanol is lower in California than in other states, and it imposes no civil or criminal penalties on

non-compliant transactions completed wholly out of state. The district court identified several factors that might encourage ethanol producers to adopt less carbon-intensive policies. *Rocky Mountain Ethanol*, 843 F.Supp.2d at 1091 (citing transportation, farming practices, and land use factors). For lifecycle analysis to be effective, it must consider all these factors and more. But California does not control these factors—directly or in practical effect—simply because it factors them into the lifecycle analysis. As the district court explained in a different order, the Fuel Standard “has no threshold [carbon intensity] requirement.” *Rocky Mountain Preemption*, 843 F.Supp.2d at 1065. It instead “encourages the use of cleaner fuels through a market system of credits and caps.” *Id.* These credits and caps apply only to the portfolios of fuel blenders in California and the producers who contract with them. *Id.* When presented with similar rules in the past, we have distinguished statutes “that regulate out-of-state parties directly” from those that “regulate[] contractual relationships in which at least one party is located in [the regulating state].” *Gravquick A/S v. Trimble Navigation Int’l Ltd.*, 323 F.3d 1219, 1224 (9th Cir.2003) (citing *Healy*, 491 U.S. at 343, 109 S.Ct. 2491).

These credits and caps instead resemble the incentives in a more recent case in which the “alleged harm to interstate commerce would be the same regardless of whether manufacturer compliance is completely voluntary or the product of coercion.” *Pharm. Research & Mfrs. of Am. v. Walsh*, 538 U.S. 644, 669, 123 S.Ct. 1855, 155 L.Ed.2d 889 (2003). In that case, Maine had encouraged drug companies to enter into rebate agreements favorable to Maine consumers. *Id.* at 653-54, 123 S.Ct. 1855. If a company refused, Maine sub-

jected that company's Medicaid sales to "prior authorization," reducing the company's sales and market share in Maine. *Id.* at 655-56, 123 S.Ct. 1855. The drug companies argued that the rebate provision controlled the terms of their sales to distributors entirely outside the state. *Id.* at 669-70, 123 S.Ct. 1855. The Court declined to extend the doctrine, noting that Maine "d[id] not regulate the price of any out-of-state transaction" or "t[ie] the price of its in-state products to out-of-state prices," as New York and Connecticut did in *Baldwin*, *Brown-Forman*, and *Healy*. *Id.* at 669, 123 S.Ct. 1855. Maine's hope to alter the decisions of the drug companies was permissible because Maine did not seek to control them. *Id.* at 679, 123 S.Ct. 1855. States may not mandate compliance with their preferred policies in wholly out-of-state transactions, but they are free to regulate commerce and contracts within their boundaries with the goal of influencing the out-of-state choices of market participants. *Id.*

Plaintiffs attempt to distinguish the Fuel Standard from cases such as *Pharmaceutical Research* by contending that the identical chemical and physical structure of ethanol prevents California from acknowledging the out-of-state emissions from the production of ethanol consumed in California, but their only support comes from broad quotes in inapposite cases. *See, e.g., Bonaparte v. Tax Court*, 104 U.S. 592, 594, 26 L.Ed. 845 (1881) (holding that under the Full Faith and Credit clause, "[n]o state can legislate except with reference to its own jurisdiction"). Plaintiffs are right that—like any government—California cannot exceed its powers. California's police power does not allow it to "invade [another state] to force reductions in greenhouse gas emissions." *Massachusetts*, 549 U.S. at 519, 127 S.Ct. 1438. It cannot peacefully impose its own regulatory standards

on another jurisdiction. *Nat'l Solid Wastes Mgmt. Ass'n*, 63 F.3d at 658-62. But California may regulate with reference to local harms, structuring its internal markets to set incentives for firms to produce less harmful products for sale in California. Plaintiffs point to no extraterritoriality cases where differences in the physical structure of a product was a prerequisite to regulation. In non-extraterritoriality cases where physical properties were relevant, it was because those properties determined the degree of harm inflicted on the regulating state. *See, e.g., Chem. Waste*, 504 U.S. at 344 n. 7, 112 S.Ct. 2009. Here, California properly based its regulation on the harmful properties of fuel. It does not control the production or sale of ethanol wholly outside California.

B

The district court next concluded that by requiring blenders to report any material change to a pathway's production and transportation process before it can generate Fuel Standard credits, CARB "forc[es] a merchant to seek regulatory approval in one State before undertaking a transaction in another." *Rocky Mountain Ethanol*, 843 F.Supp.2d at 1092 (quoting *Brown-Forman*, 476 U.S. at 582, 106 S.Ct. 2080) (internal quotation marks omitted). But the Fuel Standard requires fuel distributors to seek regulatory approval in California before undertaking a transaction also in California—the sale of fuel that generates Fuel Standard credits. States do not regulate transactions occurring wholly out of state when they impose reporting requirements that out-of-state producers must meet before making in-state sales. *See Baldwin*, 294 U.S. at 524, 55 S.Ct. 497 (holding that states may exact certificates from out-of-state producers).

As an alternative basis for invalidating the Fuel Standard as an extraterritorial regulation, the district court concluded that widespread adoption of comparable legislation by other states would Balkanize the fuels market in two ways. First, the district court explained that the Fuel Standard encourages a producer to “either relocate its operations in the State of largest use, or sell only locally to avoid transportation and other penalties.” *Id.* at 1093. This, the district court warned, would “interfere with the ‘maintenance of a national economic union unfettered by state-imposed limitations on interstate commerce.’” *Id.* (quoting *Healy*, 491 U.S. at 335-36, 109 S.Ct. 2491). Again, this misunderstands the effects of the CA-GREET transportation factor. Transportation emissions are lowest for ethanol producers who locate close to feedstocks, not consumers, so California producers face larger carbon intensities for transportation than do Midwestern or Brazilian producers. Widespread adoption of similar standards would further encourage ethanol producers to locate—as they already have—near feedstocks instead of consumers.

Second, the district court concluded that the Fuel Standard raised the danger of inconsistent regulation, warning that ethanol producers would “be hard-pressed to satisfy the requirements of 50 different [Fuel Standards].” *Id.* at 1093-94. A few jurisdictions are considering legislation similar to the Fuel Standard, but these would be complementary, encouraging similar reductions in carbon intensity across the board.¹⁴ To show the threat of inconsistent regulation,

¹⁴ See Oregon House Bill 2186 (2009); Washington Executive Order 09-05 (2009); Northeast States Center for a Clean Air Future, *Introducing a Low Carbon Fuel Standard in the*

Plaintiffs “must either present evidence that conflicting, legitimate legislation is already in place or that the threat of such legislation is both actual and imminent.” *S.D. Myers v. City of San Francisco*, 253 F.3d 461, 469-70 (9th Cir.2001) (citing *Huron Portland Cement Co. v. City of Detroit*, 362 U.S. 440, 448, 80 S.Ct. 813, 4 L.Ed.2d 852 (1960)). Plaintiffs also contend that the proliferation of similar standards would violate the “internal consistency” test from *American Trucking Associations, Inc. v. Scheiner*, which requires that we consider whether widespread adoption of similar regulation would impermissibly interfere with interstate trade. 483 U.S. 266, 284, 107 S.Ct. 2829, 97 L.Ed.2d 226 (1987). That case involved an unapportioned flat tax on trucking that did “not even purport to approximate fairly the cost or value of the use of Pennsylvania’s roads.” *Id.* at 290, 107 S.Ct. 2829. The Court explained that “[i]f each State imposed flat taxes for the privilege of making commercial entrances into its territory, there is no conceivable doubt that commerce among the States would be deterred.” *Id.* at 284, 107 S.Ct. 2829. But the Court specifically excluded from the internal consistency test regulations, such as gas taxes and the Fuel Standard, that “maintain state boundaries as a neutral factor in economic decisionmaking.” *Id.* at 283, 107 S.Ct. 2829.

The Fuel Standard does not “place[] a financial barrier around the State of [California].” *Id.* at 284, 107 S.Ct. 2829. If similar standards were adopted nationwide, they would not create the interlocking problems of cross-border price setting or out-of-state approval that appeared in *Healy* and *Edgar*. No form

of fuel would be excluded from or charged an unapportioned fee to enter any state's market, no state would attempt to control which fuels were available in other states, and no state would peg its fuel prices or regulatory standards to those of another. So long as California regulates only fuel consumed in California, the Fuel Standard does not present the risk of conflict with similar statutes. *See Valley Bank of Nev. v. Plus Sys., Inc.*, 914 F.2d 1186, 1192 (9th Cir.1990) (holding that "inconsistent state laws on [ATM] transaction fees can coexist without conflict as long as each state regulates only its own banks").

If we were to invalidate regulation every time another state considered a complementary statute, we would destroy the states' ability to experiment with regulation. Successful experiments inspire imitation both vertically, as when the federal government followed California's lead on air pollution, and horizontally, as shown by the federal Organic Foods Production Act of 1990, 7 U.S.C. §§ 6501-23, adopted after twenty-two states, starting with Oregon, enacted organic food labeling standards. *See Or.Rev.Stat.* § 632.925 (1973); S.Rep. No. 357, *reprinted in* 1990 U.S.C.C.A.N. 4656, 4943. After nearly half of the states acted, Congress provided a uniform standard. As it did there, Congress may decide that uniformity is warranted and set a national fuel standard. If it does so after several states have acted, it will have the benefit of their experiments. But when or if such uniformity is desirable is not a question for courts. The proliferation of organic labeling standards did not threaten our economic union, and the possibility that many states might perform lifecycle analysis on fuel sold within their borders does not risk the "competing and interlocking local economic regulation that the

Commerce Clause was meant to preclude.” *Healy*, 491 U.S. at 337, 109 S.Ct. 2491.

With the Fuel Standard, California “has essentially assumed legal and political responsibility for emissions of carbon resulting from the production and transport, regardless of location, of transportation fuels actually used in California.” *Rocky Mountain Ethanol*, 843 F.Supp.2d at 1092. To Plaintiffs, this attempt to take responsibility is indistinguishable from taking control, from attempting to force other jurisdictions to adopt California’s standards. But to the contrary, California and its citizens have chosen to acknowledge and account for the ill effects of their fuel consumption. This decision is one of a long series in which California has chosen to pay for environmental protection. The Commerce Clause does not protect Plaintiffs’ ability to make others pay for the hidden harms of their products merely because those products are shipped across state lines. The Fuel Standard has incidental effects on interstate commerce, but it does not control conduct wholly outside the state. Those effects may be considered under *Pike* on remand. 397 U.S. at 142, 90 S.Ct. 844.

V

CARB contends that Section 211(c)(4)(b) of the Clean Air Act authorized the Fuel Standard under the Commerce Clause. Although we reverse the district court’s conclusions on the dormant Commerce Clause, this claim is not moot because the district court will consider further dormant Commerce Clause issues on remand. Rejecting CARB’s contention, the district court concluded that CARB “failed to establish that the savings clause [] demonstrate[s] express exemption from Commerce Clause scrutiny.” *Rocky Mountain Preemption*, 843 F.Supp.2d at 1070. We agree.

Section 211(c)(4)(a) of the Clean Air Act preempts state laws prescribing, “for purposes of motor vehicle emission control, any control or prohibition respecting any characteristic or component of a fuel or fuel additive.” 42 U.S.C. § 7545(c)(4)(A). The next subsection of the Act exempts California from that explicit preemption. *Id.* § 7545(c)(4)(B) (Section 211(c)(4)(b)). The Fuel Standard falls within this exemption because it is “a control respecting a fuel or fuel additive and was enacted for the purpose of emissions control.” *Rocky Mountain Preemption*, 843 F.Supp.2d at 1061 (citing Clean Air Act Section 211(c)(4)(B)). But we have previously held that “the sole purpose of [Section 211(c)(4)(B)] is to waive for California the express preemption provision found in § 7545(c)(4)(A).” *Davis v. EPA*, 348 F.3d 772, 786 (9th Cir.2003); *see also Oxygenated Fuels Ass’n Inc. v. Davis*, 331 F.3d 665, 670 (9th Cir.2003) (holding that “the two provisions are precisely coextensive”). On this point, our precedent forecloses CARB’s argument.

VI

The California legislature has determined that the state faces tremendous risks from climate change. With its long coastlines vulnerable to rising waters, large population that needs food and water, sizable deserts that can expand with sustained increased heat, and vast forests that may become tinderboxes with too little rain, California is uniquely vulnerable to the perils of global warming. The California legislature determined that GHG emissions from the production and distribution of transportation fuels contribute to this risk, and that those emissions are caused by the in-state consumption of fuels. Whether or not one agrees with the science underlying those views, those determinations are permissible ones for

the legislature to make, and the Supreme Court has recognized that these risks constitute local threats. *See Massachusetts*, 549 U.S. at 522, 127 S.Ct. 1438.

To combat these risks, the California legislature and its regulatory arm CARB chose to institute a market-based solution that recognizes the costs of harmful carbon emissions. For any such system to work, two conditions must be met. First, the market must have full and accurate information about the real extent of GHG emissions. Second, the compliance costs of entering the market must not be so great as to prevent participation. Plaintiffs attack the lifecycle analysis and default pathways that fulfill these conditions, relying on archaic formalism to prevent action against a new type of harm. It has been sagely observed by Justice Jackson that the constitutional Bill of Rights is not a “suicide pact.” *See Terminiello v. City of Chicago*, 337 U.S. 1, 37, 69 S.Ct. 894, 93 L.Ed. 1131 (1949) (Jackson, J., dissenting). Nor is the dormant Commerce Clause a blindfold. It does not invalidate by strict scrutiny state laws or regulations that incorporate state boundaries for good and non-discriminatory reason. It does not require that reality be ignored in lawmaking.

California should be encouraged to continue and to expand its efforts to find a workable solution to lower carbon emissions, or to slow their rise. If no such solution is found, California residents and people worldwide will suffer great harm. We will not at the outset block California from developing this innovative, nondiscriminatory regulation to impede global warming. If the Fuel Standard works, encouraging the development of alternative fuels by those who would like to reach the California market, it will help ease

California's climate risks and inform other states as they attempt to confront similar challenges.

VII

The Fuel Standard's ethanol provisions are not facially discriminatory, so we reverse that portion of the district court's decision and remand for entry of partial summary judgment in favor of CARB. We also reverse the district court's decision that the Fuel Standard is an impermissible extraterritorial regulation and we direct that an order of partial summary judgment be entered in favor of CARB on those grounds. We remand the case for the district court to determine whether the ethanol provisions discriminate in purpose or effect and, if not, to apply the *Pike* balancing test.

We affirm the district court's conclusion that the 2011 Provisions are not facially discriminatory, but we reverse its holding that the 2011 Provisions are discriminatory in purpose and effect, and we direct the district court to enter an order of partial summary judgment in favor of CARB on those issues. We remand to the district court to apply the *Pike* balancing test to the 2011 Provisions. We affirm the district court's conclusion that Section 211(c)(4)(b) of the Clean Air Act does not insulate California from scrutiny under the dormant Commerce Clause. Rocky Mountain contends that the preliminary injunction should be lifted if CARB prevails on the merits of the dormant Commerce Clause on which the district court based its injunction. We agree and remand to the district court with instructions to vacate the preliminary injunction. We express no opinion on Plaintiffs' claim that the Fuel Standard is preempted by the RFS. We also express no opinion on CARB's claim that the savings clause in the Energy Independence and

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Security Act of 2007 precludes implied preemption by the RFS.

Each party shall bear its own costs.

AFFIRMED in part, REVERSED in part, VACATED, and REMANDED.

Partial Concurrence and Partial Dissent by Judge MURGUÍA.

MURGUÍA, Circuit Judge, concurring in part and dissenting in part:

While I agree with the majority's conclusions concerning the crude oil regulations and preemption under the Clean Air Act, I respectfully dissent from the majority's conclusion that the Low Carbon Fuel Standard's ("LCFS") ethanol regulations do not facially discriminate against interstate commerce.

I.

Determining whether a regulation facially discriminates against interstate commerce begins and ends with the regulation's plain language. Discrimination "simply means differential treatment of in-state and out-of-state economic interests that benefits the former and burdens the latter." *Or. Waste Sys., Inc. v. Dep't Env't Quality of State of Or.*, 511 U.S. 93, 99, 114 S.Ct. 1345, 128 L.Ed.2d 13 (1994). "[T]he purpose of, or justification for, a law has no bearing on whether it is facially discriminatory." *Id.* at 100, 114 S.Ct. 1345. Only after we find discrimination do we address, in our application of strict scrutiny, whether the reason for the discrimination is sufficiently compelling to justify the regulation. *See, e.g., Or. Waste Sys.*, 511 U.S. at 100-07, 114 S.Ct. 1345 (examining purported justifications for facially discriminatory regulation); *Chem. Waste Mgmt., Inc. v. Hunt*, 504 U.S. 334, 342, 112 S.Ct. 2009, 119 L.Ed.2d 121 (1992) (noting that the "additional fee facially discriminates" and *then* examining the purported justifications for the discrimination).

I would therefore look only to the text of the LCFS to determine if it facially discriminates against out-of-state ethanol. *See Camps Newfound/Owatonna, Inc.*

v. Town of Harrison, 520 U.S. 564, 575-76, 117 S.Ct. 1590, 137 L.Ed.2d 852 (1997) (“It is not necessary to look beyond the text of this statute to determine that it discriminates against interstate commerce.”). Table 6 differentiates between in-state and out-of-state ethanol, according more preferential treatment to the former at the expense of the latter.¹ Table 6 thus facially discriminates against out-of-state ethanol. *See Or. Waste Sys., Inc.*, 511 U.S. at 100, 114 S.Ct. 1345 (“In making [the] geographic distinction, the [regulation] patently discriminates against interstate commerce.”).²

The majority puts the cart before the horse and considers California’s reasons for distinguishing between in-state and out-of-state ethanol before examining the text of the statute to determine if it facially discriminates. This approach is inconsistent with Supreme Court precedent, which instructs that we

¹ Three examples are illustrative. The LCFS assigns a default carbon intensity value of 88.90 gCO₂e/MJ to California producers utilizing a dry mill, dry DGS, and natural gas production process. Midwest producers utilizing the same production process are assigned a default carbon intensity value of 98.40 gCO₂e/MJ, resulting in a 9.5 gCO₂e/MJ difference in favor of California producers. Next, California producers utilizing a dry mill, dry DGS, eighty percent natural gas, and twenty percent biomass production process enjoy a 9.4 gCO₂e/MJ lower carbon intensity value than their Midwest counterparts. Finally, California producers benefit from a 9.36 gCO₂e/MJ lower carbon intensity value over their Midwest counterparts for a dry mill, wet DGS, eighty percent natural gas, and twenty percent biomass production process.

² Because I conclude that the LCFS ethanol regulation facially discriminates, I do not reach the alternative argument that it regulates extraterritorial conduct.

must determine whether the regulation is discriminatory before we address the purported reasons for the discrimination. *See Or. Waste Sys.*, 511 U.S. at 99, 114 S.Ct. 1345.

II.

Because the LCFS facially discriminates against interstate commerce, it is subject to strict scrutiny and is unconstitutional unless California can demonstrate that it: (1) serves a legitimate local purpose, and (2) that purpose could not be served as well by available nondiscriminatory means. *Maine v. Taylor*, 477 U.S. 131, 138, 106 S.Ct. 2440, 91 L.Ed.2d 110 (1986). “The State’s burden of justification is so heavy that ‘facial discrimination by itself may be a fatal defect.’” *Or. Waste Sys., Inc.*, 511 U.S. at 101, 114 S.Ct. 1345 (quoting *Hughes v. Oklahoma*, 441 U.S. 322, 337, 99 S.Ct. 1727, 60 L.Ed.2d 250 (1979)).

I would find that the LCFS serves the local purpose of reducing GHG emissions because California has a “legitimate interest in guarding against imperfectly understood environmental risks, despite the possibility that they may ultimately prove to be negligible.” *Taylor*, 477 U.S. at 148, 106 S.Ct. 2440; *see also Massachusetts v. EPA*, 549 U.S. 497, 516-21, 127 S.Ct. 1438, 167 L.Ed.2d 248 (2007) (holding, for purposes of standing, that Massachusetts has an interest in regulating GHG emissions).

The second question—whether California can reduce GHG emissions through nondiscriminatory means—is more difficult. As explained by the majority, California’s decision to disfavor out-of-state ethanol is connected to the goal of reducing lifecycle GHG emissions because California calculated that, on average, ethanol from other states produces more

lifecycle GHG emissions. But even if, on average, ethanol from other states produces more lifecycle GHG emissions, that does not mean that the only way to regulate those emissions is by penalizing out-of-state producers. *See Toomer v. Witsell*, 334 U.S. 385, 397-98, 68 S.Ct. 1156, 92 L.Ed. 1460 (1948) (observing that even if out-of-state fishing boats were larger and more disruptive than in-state boats, the state could simply regulate the size of the boats). For example, if the LCFS treated ethanol produced in efficient plants more favorably than ethanol from inefficient plants—rather than taking the shortcut of assuming that plants outside of California are less efficient—it could reduce lifecycle GHG emissions without facially discriminating against out-of-state ethanol. In fact, at oral argument, California acknowledged that there exist alternative ways to use lifecycle analysis to reduce GHG emissions:

THE COURT: Is it your contention that the [LCFS] currently written represents the only way that the lifecycle analysis approach can be implemented or ever utilized to address [GHG] emissions?

DEFENDANTS-APPELLANTS: *It's not our position that the LCFS is the only way the lifecycle could be used.* It is our position that the lifecycle is the only way to accurately measure [GHG] emissions from transportation fuels.

Hr'g Tr. 4:59-5:28 (Oct. 16, 2012) (emphasis added).

The nondiscriminatory alternative is apparent in the LCFS's current structure: Regulated parties may seek individualized pathways that use lifecycle analysis, but not Table 6's discriminatory carbon intensity

values. These pathways are a reasonable, nondiscriminatory alternative that California could use to reduce lifecycle GHG emissions. This reasonable alternative, even if it is more difficult or costly to implement, means that California has failed to meet its burden of showing that discriminating against out-of-state ethanol is the only way to reduce lifecycle GHG emissions. *Cf. Taylor*, 477 U.S. at 147, 106 S.Ct. 2440 (while a state need not “develop new and unproven means of protection at an uncertain cost,” it “must make reasonable efforts to avoid restraining the free flow of commerce across its borders”).³

CONCLUSION

The LCFS is the latest chapter in California’s long history of innovative solutions to complicated environmental problems. But the current version of the LCFS facially discriminates against interstate commerce and California has failed to meet its onerous burden of demonstrating that a nondiscriminatory version of the regulation could not achieve its legitimate local interest of reducing GHG emissions. For this reason, I respectfully dissent.

³ This is not to say that the only constitutional version of the LCFS is one that eliminates all default pathways. Rather, it could include default pathways that do not discriminate against ethanol solely because it was produced outside of California.

Appendix One

**Table 6 (2011);
Cal.Code Regs. tit. 17, § 95486(b)(1)**

Fuel	Pathway Description	Carbon Intensity Value(gCO ₂ e/MJ)		
		Direct Emissions	Land Use	Total
	Midwest average: 80% Dry Mill; 20% Wet Mill; Dry DGS; NG	69.40	30	99.40
	California average: 80% Dry Mill; 20% Wet Mill; Dry 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
	Midwest; Wet Mill, 100% NG	64.52	30	94.52
	Midwest; Wet Mill, 100% coal	90.99	30	120.99
	Midwest; Dry Mill; Wet DGS	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
Ethanol from Corn	Midwest; Dry Mill; Wet DGS; 80% NG; 20% Biomass	56.80	30	86.80

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	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

CARBOB: California Reformulated Gasoline
Blendstock for Oxygenate Blending

DGS: Distillers' Grains

NG: Natural Gas

Appendix Two

Table 6 Breakout

This table shows the complete CA-GREET pathways for Midwest and California ethanol pathways using a dry-mill process, using natural gas for thermal energy (for heating the corn), and producing dry distillers' grains as a co-product.

	Midwest Pathway	California Pathway
Lifecycle Component	Carbon Intensity	Carbon Intensity
Growing of Corn	35.8	35.8
Transportation of Corn to Plant	2.2	6.8
Energy Use by Plant		
Natural Gas	27.1	24.0
Electricity	11.4	3.1
Credit for Co- Products	-11.5	-12.9
Transportation from Plant to Distribution Points in California	0.8	1.3
Denaturant	0.8	0.8
Subtotal: Direct Emissions	68.4	58.9
Land Use Change	30	30
Total Carbon Intensity	98.4	88.9

APPENDIX B

UNITED STATES DISTRICT COURT,
E.D. CALIFORNIA

Case Nos. CV-F-09-2234 LJO DLB,
CV-F-10-163 LJO DLB.

ROCKY MOUNTAIN FARMERS UNION,
REDWOOD COUNTY MINNESOTA CORN AND SOYBEAN
GROWERS, PENNY NEWMAN GRAIN, INC., GROWTH
ENERGY, RENEWABLE FUELS ASSOCIATION, REX
NEDEREND, FRESNO COUNTY FARM BUREAU, NISEI
FARMERS LEAGUE, AND CALIFORNIA DAIRY CAMPAIGN,
Plaintiffs,

v.

JAMES N. GOLDSTENE, EXECUTIVE OFFICER OF THE
CALIFORNIA AIR RESOURCES BOARD,
Defendant.

NATIONAL PETROCHEMICAL & REFINERS ASSOCIATION,
AMERICAN TRUCKING ASSOCIATIONS, CENTER FOR
NORTH AMERICAN ENERGY SECURITY, AND THE
CONSUMER ENERGY ALLIANCE,
Plaintiffs,

v.

JAMES GOLDSTENE, EXECUTIVE OFFICER OF THE
CALIFORNIA AIR RESOURCES BOARD, MARY D. NICHOLS,
DANIEL SPERLING, KEN YEAGER, DORENE D'ADAMO,
BARBARA RIORDAN, JOHN R. BALMES, LYDIA H.
KENNARD, SANDRA BERG, RON ROBERTS, RONALD O.
LOVERIDGE, MEMBER OF THE CALIFORNIA AIR RESOURCES
BOARD; ARNOLD SCHWARZENEGGER, GOVERNOR OF THE
STATE OF CALIFORNIA, AND EDMUND BROWN,
ATTORNEY GENERAL OF THE STATE OF CALIFORNIA,
Defendants.

AND RELATED INTERVENOR ACTIONS AND AMICI

Dec. 29, 2011

OPINION

ORDER ON RMFU PLAINTIFFS' SUMMARY
ADJUDICATION MOTION (Doc. 111)

ORDER ON DEFENDANT'S RENEWED
FED. R. CIV. P. 56(D) MOTION (Doc. 172)

ORDER ON RMFU PLAINTIFFS' PRELIMINARY
INJUNCTION MOTION (Doc. 115)

ORDER ON RMFU PLAINTIFFS SUMMARY
ADJUDICATION MOTION (Doc. 111)

ORDER ON DEFENDANT'S RENEWED
FED. R. CIV. P. 56(D) MOTION (Doc. 172)

ORDER ON RMFU PLAINTIFFS' PRELIMINARY
INJUNCTION MOTION (Doc. 115)

LAWRENCE J. O'NEILL, District Judge.

INTRODUCTION

Plaintiffs Rocky Mountain Farmers Union, Redwood County Minnesota Corn and Soybean Growers, Penny Newman Grain, Inc., Fresno County Farm Bureau, Nisei Farmers League, California Dairy Campaign, Rex Nederend, Growth Energy and the Renewable Fuels Association (collectively "Plaintiffs" or "Rocky Mountain Plaintiffs") seek summary judgment pursuant to Fed.R.Civ.P. 56 and an order enjoining enforcement of California's Low Carbon Fuel Standard, Cal.Code Regs. tit. 17, §§ 95480-95490 ("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. Health & Saf.Code, § 38500 et seq.

Rocky Mountain Plaintiffs argue that the LCFS violates the Commerce Clause, U.S. Const. art. I, § 8, cl. 3 and is preempted by federal law. In this summary judgment motion, the Rocky Mountain Plaintiffs argue that the LCFS fails as a matter of law because it: (1) impermissibly discriminates against out-of-state corn ethanol; (2) impermissibly regulates commerce and the channels of interstate commerce; (3) excessively burdens interstate commerce without producing local benefits; and (4) is preempted by the Energy Independence and Security Act of 2007 (“EISA”).

CARB argues that the Rocky Mountain Plaintiffs’ motion improperly and prematurely seeks to adjudicate fact-based issues. By separate motion, CARB moves to deny this motion pursuant to Fed.R.Civ.P. 56(d) as premature, because the parties have conducted only limited discovery, and as a sanction for the Rocky Mountain Plaintiffs’ failure to produce certain requested and court-ordered discovery. Moreover, CARB contends that the LCFS is authorized by 42 U.S.C. § 7545(c)(4)(B) (“Section 211(c)(4)(B)”), precluding Plaintiffs’ preemption claim. Similarly, CARB argues that Section 211(c)(4)(B) authorizes California to violate the dormant Commerce Clause. Finally, Defendants argue that the LCFS neither violates the Commerce Clause nor is preempted by EISA as a matter of law and that the

¹ The defendant in this action is James N. Goldstene, in his official capacity as Executive Director of the California Air Resources Board (“CARB”).

Rocky Mountain Plaintiffs lack standing to raise a preemption claim.

Having considered the parties' arguments, exhibits, and relevant case law, this Court finds that the LCFS impermissibly discriminates against out-of-state corn ethanol and impermissibly regulates extra-territorially in violation of the dormant Commerce Clause and its jurisprudence. Accordingly, the Rocky Mountain Plaintiffs' summary judgment motion is GRANTED in part.² On its preemption claim, this Court finds that the Rocky Mountain Plaintiffs have failed to establish the appropriate standard of review. Accordingly, summary judgment is DENIED without prejudice on that issue. Because this Court's conclusions are based on arguments that are not subject to Defendants Fed.R.Civ.P. 56(d) motion, this Court DENIES that motion as moot. This Court further finds that because the Rocky Mountain Plaintiffs have established a likelihood of success on the merits of their Commerce Clause claim, and raise serious questions related to their preemption claim, likelihood of irreparable harm, and the balance of the equities so tips in their favor, this Court GRANTS the Rocky Mountain Plaintiffs' preliminary injunction motion

² This Court leaves unaddressed some arguments raised by the Rocky Mountain Plaintiffs. Because this Court finds that the LCFS discriminates against interstate commerce on its face, for example, this Court does not reach the Rocky Mountain Plaintiffs' arguments related to discriminatory effects or factors relevant to an analysis pursuant to *Pike v. Bruce Church, Inc.*, 397 U.S. 137, 142, 90 S.Ct. 844, 25 L.Ed.2d 174 (1970). In addition, because neither party has established an appropriate standard of review to determine the merits of the Rocky Mountain Plaintiffs' preemption claim, this Court does not reach the merits of that claim. This Court neither resolves nor asserts an opinion on these arguments, unless otherwise specified.

and ENJOINS enforcement of the LCFS during the pendency of this litigation.

BACKGROUND³

Introduction

In enacting the Global Warming Solutions Act of 2006, AB 32, the California Legislature found, *inter alia*: “Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California.” Cal. Health & Saf.Code, § 38501. AB 32 set the goal of reducing greenhouse gas (“GHG”) emissions in California to 1990 levels by the year 2020. To attain these goals, AB 32 charged CARB to develop and implement regulations in a number of areas.

In January 2007, California’s Governor issued Executive Order S-01-07 (“Executive Order”), setting a statewide goal to “reduce the carbon intensity of California’s transportation fuels by at least 10 percent by 2020.” In the Executive Order, the Governor called on CARB to “determine if [a low carbon fuel standard] can be adopted as a discrete early action measure pursuant to AB 32.” *Id.* In June 2007, CARB adopted the low carbon fuel standard (“LCFS”) as an early action measure. Public workshops on the issue and formal rule-making procedures followed, culminating in the final adoption of the regulation in April 2010. Cal.Code Regs. tit. 17, §§ 95480-95490.

LCFS

Plaintiffs challenge the LCFS regulations in this action. The purpose of the LCFS is “to implement

³ This Court presents only the background facts that are relevant to this motion.

a low carbon fuel standard, which will reduce greenhouse gas emissions by reducing the full fuel-cycle, carbon intensity of the transportation fuel used in California.” LCFS § 95480. The LCFS was “designed to reduce California’s dependence on petroleum” and “to stimulate and the production and use of alternative, low-carbon fuels in California.” CARB, *Final Statement of Reasons* (“FSOR”) at 457; FSOR at 461 (“One of the key advantages of the LCFS . . . is that it reduces our dependence on foreign oil.”). In preparing the LCFS, CARB identified several “impacts” the regulation would have, including:

Biofuels will displace some percent of petroleum-based transportation fuels.

* * *

Reducing the volume of transportation fuels that are imported from other states will reduce foreign imports of oil into the U.S.

* * *

The biorefineries to be built in the States will provide needed employment, an increased tax base for the States, and value added to the biomass used as feedstock. These benefits will be more important in rural areas of the State that are short on employment but rich in natural resources.

Displacing important transportation fuels with biofuels produced in the State keeps more money in the States.

FSOR at 479. CARB estimated that under the LCFS, “[u]p to eighteen cellulosic ethanol and six corn ethanol plants could be built [in California] by 2020 with a total annual capacity of 1.2 billion

gallons.” FSOR at 419. “The estimated capital investment for these new businesses is approximately \$8.5 billion . . .” FSOR at 420. CARB estimates that the LCFS will reduce emissions from the transportation sector by about 16 million metric tons in 2020. CARB, *Initial Statement of Reasons* (“ISOR”) at ES-1.

The LCFS regulates transportation fuels that are “sold, supplied, or offered for sale in California” and “any person, who as a regulated party . . . is responsible for a transportation fuel in a calendar year.” LCFS § 95480.1(a). California’s LCFS focuses on the “carbon intensity” of fuels to estimate emissions related to a fuel’s lifecycle, including GHGs emitted when the fuel is extracted, refined, and transported to 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. *See* LCFS § 95482(b), (c).

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 to determine their score. LCFS § 95486(a), and must compare it with the statewide average carbon intensity level for that year. If a party’s score is below the statewide average level, the party may generate credits, provided it has obtain credit-generation approval by CARB. One obtains and maintains approval depending on how that party produces, ships, delivers and distributes its fuels from the location where the fuel is produced to where it ends up in California. LCFS § 95484(d)(2). If the party’s carbon

intensity score is above the statewide average level, the party will generate deficits, which must be canceled either by retiring accumulated credits or purchasing credits from others. LCFS § 95485.

Reductions in the average carbon intensity were mandated to begin in 2011, with the reduction requirement increasing through the year 2020.

Carbon Intensity

“Carbon intensity is not an inherent chemical property of a fuel, but rather it is a reflective of the process in making, distributing, and using that fuel.” FSOR at 951. The “LCFS contains no requirements that dictate the exact composition of compliant transportation fuels.” FSOR at 442. The LCFS does “not set[] a fuel standard,” and it does not “establish any motor-vehicle specifications.” FSOR at 439, 442.

A gallon of ethanol made from corn grown and processed in the Midwest will, under a 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, corn ethanol from the Midwest will have different carbon intensity than the sugar cane ethanol from Brazil.

ISOR V-30.

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. [sic] LCFS § 95481(a)(11). “Lifecycle greenhouse gas emissions” are defined 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 § 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 § 95481(a)(28). 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.

CARB-Assigned Corn Ethanol Carbon Intensity Values

The LCFS has assigned carbon intensity scores for gasoline and gasoline substitutes, embodied in the Table 6 of LCFS § 95486(b), titled “Carbon Intensity Lookup Table for Gasoline and Fuels that Substitute for Gasoline” (“Table 6”). CARB, through Table 6, assigns different carbon intensity scores to different gasoline and gasoline substitutes, including gasoline, ethanol from corn, ethanol from sugar cane, compressed natural gas, liquified natural gas, electricity, and hydrogen. These carbon intensity

values set a 2010 baseline carbon intensity value to each of the fuels and pathways. Within the “ethanol from corn” section, more than a dozen “pathways” are identified, each assigned a carbon intensity value. Numerous distinctions are drawn among different categories of corn ethanol producers.

Plaintiffs argue that the LCFS discriminates against out-of-state ethanol producers on its face, because the LCFS assigns more favorable carbon intensity values to California corn-derived ethanol than to Midwest corn-derived ethanol. The relevant section of Table 6 assigns the following values to the different corn-ethanol pathways⁴:

Pathway Description	Carbon Intensity Value (gCO₂e/MJ)		
	Direct Emissions	Land Use or Other Indirect Effect	Total
Midwest Average; 80% Dry Mill; 20% Wet Mill; Dry DGS	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 SGS; NG	50.70	30	80.70
Midwest; Dry Mill; Dry	68.40	30	98.40

⁴ The LCFS assigns carbon-intensity scores for corn ethanol based on the “location of the production facility (California or Midwest),” the “type of corn milling (wet or dry),” the “type of distillers grains produced (wet or dry),” and the “source of fuel for heat energy and co-generated electrical power (natural gas, coal, biomass).” FSOR at 508.

85a

DGS, NG			
Midwest; Wet Mill, 60% NG, 40% Coal	75.10	30	105.10
Midwest; Wet Mill, 100% NG	64.52	30	94.52
Midwest; Wet Mill, 100% Coal	90.99	30	120.99
Midwest; Dry Mill, Wet, DGS	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, Dry 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

Customized Carbon Intensity Values and Pathways

In addition to the default assigned values contained in Table 6, CARB provides two methods for a facility to apply for a customized total carbon intensity value. See LCFS § 95486(c), (d). Under these mechanisms—named Method 2A and Method 2B in the LCFS—a facility may show that it has more efficient equipment or uses cleaner electricity to gain an individualized carbon intensity value. Under these methods, a facility may also propose its own pathway. “Producers whose energy use data are different from the values used in the development of the fuel pathways or producers whose process deviates substantially from that of the pathways represented in [Table 6] can propose their

own pathways according to Methods 2A and 2B.” FSOR at 508.

CARB submits that to date, 44 Midwest corn ethanol facilities have registered for pathways in Table 6, with 25 indicating that they can produce ethanol lower than the 2010 baseline assigned in Table 6. Five Midwest corn ethanol facilities have applied under Method 2A and Method 2B, with a total of 22 pathways, all of which tentatively have been granted a rating lower than the value for the 2010 baseline for that pathway. Moreover, to date, three facilities that are Midwest; Dry Mill, Dry DGS, NG have applied under Method 2A for an individualized carbon intensity value, and tentatively have been given a value lower than the 2010 baseline for California gasoline.

JUDICIAL NOTICE, OBJECTIONS,
AND CONSIDERATION OF EVIDENCE
AND ARGUMENTS

In addition to the pending motion, the parties have submitted requests for judicial notice, objections to evidence submitted, motions to strike, and other miscellany. Moreover, this Court has received multiple amici curiae briefs. This Court carefully reviewed and considered the record, including all evidence, arguments, points and authorities, declarations, testimony, statements of undisputed facts and responses thereto, objections and other papers filed by the parties. Omission of reference to evidence, an argument, document, objection or paper is not to be construed to the effect that this Court did not consider the evidence, argument, document, objection or paper. This Court thoroughly reviewed, considered and applied the evidence it deemed admissible, material and appropriate for summary judgment. This Court

does not rule on objections in a summary judgment context, unless otherwise noted.

Moreover, this Court will not address the request for judicial notice specifically, but notes the following applicable standards. To be judicially noticeable, 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 appropriate for records and reports of administrative bodies.” *United States v. 14.02 Acres of Land More or Less in Fresno County*, 547 F.3d 943, 955 (9th Cir.2008). This Court may not take judicial notice, however, of documents filed with an administrative agency to prove the truth of the contents of the documents. The comments made by third parties that are included in the ISOR or FSOR are subject to hearsay objections, and do not rise to the “high degree of indisputability” required for judicial notice for their truth. *Jespersen v. Harrah’s Operating Co.*, 444 F.3d 1104, 1110 (9th Cir.2006) (citing Fed.R.Evid. 201 advisory committee’s note). If cited, these statements may be considered for their existence, but not their truth. *Id.* In addition, this Court takes judicial notice of public records not subject to reasonable dispute. *See Hennessy v. Penril Datacomm Networks, Inc.*, 69 F.3d 1344, 1354-55 (7th Cir.1995) (court properly refused to take judicial notice of corporation’s SEC form to determine disputed fact because “its contents were subject to dispute”). While this Court may take judicial notice of the legislative histories, the statements contained therein may be subject to dispute.

SUMMARY JUDGMENT MOTION

STANDARD OF REVIEW

Fed.R.Civ.P. 56 permits a “party against whom relief is sought” to seek “summary judgment on all or part of the claim.” In a summary judgment motion, a court must decide whether there is a “genuine issue as to any material fact.” Fed.R.Civ.P. 56(c); *see also*, *Adickes v. S.H. Kress & Co.*, 398 U.S. 144, 157, 90 S.Ct. 1598, 26 L.Ed.2d 142 (1970). A party seeking summary judgment/adjudication bears the initial burden of establishing the absence of a genuine issue of material fact. *See Celotex Corp. v. Catrett*, 477 U.S. 317, 323, 106 S.Ct. 2548, 91 L.Ed.2d 265 (1986). The moving party may satisfy this burden by: (1) presenting evidence that negates an essential element of the nonmoving party’s case; or (2) demonstrating that the nonmoving party failed to make a showing of sufficient evidence to establish an essential element of the nonmoving party’s claim, and on which the nonmoving party bears the burden of proof at trial. *Id.* at 322, 106 S.Ct. 2548. “The judgment sought should be rendered if the pleadings, the discovery and disclosure materials on file, and any affidavits show that there is no genuine issue as to any material fact and that the movant is entitled to judgment as a matter of law.” Fed.R.Civ.P. 56(c). “If the party moving for summary judgment meets its initial burden of identifying for the court those portions of the material on file that it believes demonstrates the absence of any genuine issues of material fact,” the burden of production shifts and the nonmoving party must set forth “specific facts showing that there is a genuine issue for trial.” *T.W. Elec. Serv., Inc. v. Pac. Elec. Contractors Ass’n*, 809 F.2d 626, 630 (9th Cir.1987) (quoting Fed.R.Civ.P. 56(e)).

To establish the existence of a factual dispute, the opposing party need not establish a material issue of fact conclusively in its favor, but “must do more than

simply show that there is some metaphysical doubt as to the material facts.” *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 587, 106 S.Ct. 1348, 89 L.Ed.2d 538 (1986). It is sufficient that “the claimed factual dispute be shown to require a jury or judge to resolve the parties’ differing versions of the truth at trial.” *First Nat. Bank of Arizona v. Cities Serv. Co.*, 391 U.S. 253, 289, 88 S.Ct. 1575, 20 L.Ed.2d 569 (1968); *T.W. Elec. Serv.*, 809 F.2d at 631. The non-moving party must “go beyond the pleadings and by her own affidavits, or by depositions, answer to interrogatories, and admissions on file, designate specific facts showing that there is a genuine issue for trial.” *Celotex*, 477 U.S. at 324, 106 S.Ct. 2548. Fed.R.Civ.P. 56(e) requires a party opposing summary judgment to “set out specific facts showing that there is a genuine issue for trial.” “In the absence of specific facts, as opposed to allegations, showing the existence of a genuine issue for trial, a properly supported summary judgment motion will be granted.” *Nilsson, Robbins, et al. v. Louisiana Hydrolec*, 854 F.2d 1538, 1545 (9th Cir.1988).

DISCUSSION

I. Commerce Clause Challenges

The dormant Commerce Clause “directly limits the power of the States to discriminate against interstate commerce.” *Wyoming v. Oklahoma*, 502 U.S. 437, 454, 112 S.Ct. 789, 117 L.Ed.2d 1 (1992); *NCAA v. Miller*, 10 F.3d at 633, 638 (9th Cir.1993). “Discrimination simply means differential treatment of in-state and out-of-state economic interests that benefits the former and burdens the latter.” *United Haulers Ass’n v. Oneida-Herkimer Solid Waste Mgmt. Auth.*, 550 U.S. 330, 331, 127 S.Ct. 1786, 167 L.Ed.2d 655 (2007). “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).

A. Whether LCFS is Subject to Commerce Clause Challenge

Defendants contend that the LCFS is not subject to Commerce Clause challenge. This Court addresses Defendants' arguments by separate order. In short, this Court concluded Section 211(c)(4)(B) of the Clean Air Act provides no express or unambiguous authority for California to violate the Commerce Clause. Accordingly, the LCFS is subject to Commerce Clause scrutiny.

B. Applicable Standard of Review

In reviewing a dormant Commerce Clause challenge, the Court must first consider the applicable standard of review. If a law discriminates against out-of-state entities, or attempts to regulate beyond a state's jurisdiction, then the Court applies a strict scrutiny standard. *Healy v. Beer Inst.*, 491 U.S. 324, 336-37, 109 S.Ct. 2491, 105 L.Ed.2d 275 (1989). If a law regulates in-state and out-of-state entities evenly and attempts to regulate only in-state activity, then the Court applies a balancing test. *Pike v. Bruce Church, Inc.*, 397 U.S. 137, 142, 90 S.Ct. 844, 25 L.Ed.2d 174 (1970). The strict scrutiny standard is difficult to satisfy, whereas the *Pike* balancing test is more favorable to the state law.

The Rocky Mountain Plaintiffs contend that the LCFS is subject to strict scrutiny analysis because it discriminates against out-of-state interests. A law or regulatory scheme “can discriminate against out-of-state interests in three different ways: (1) facially; (2) purposefully, or (3) in practical effect.” *Nat’l Ass’n of Optometrists & Opticians LensCrafters, Inc. v. Brown*, 567 F.3d 521, 525 (9th Cir.2009). The Rocky Mountain Plaintiffs argue that the LCFS discriminates in all three ways. The Rocky Mountain Plaintiffs assert that the LCFS: (1) facially discriminates because it assigns a higher carbon intensity score to corn-derived ethanol from the Midwest than it assigns to corn-derived ethanol from California; (2) practically discriminates because it purports to base carbon intensity scores on variables that are intertwined with origin (transportation and electricity); and (3) purposefully discriminates by closing California to Midwest corn ethanol while preserving a market for local corn ethanol. The Rocky Mountain Plaintiffs further argue that the LCFS impermissibly regulates out-of-state activity and is subject to strict scrutiny analysis. In the alternative, the Rocky Mountain Plaintiffs argue that the LCFS also fails the *Pike* analysis because it excessively burdens interstate commerce without producing local benefits.

Defendants counter that the strict scrutiny analysis is improper, because the LCFS is a neutral law that applies evenly to all fuel-providers within the state of California. Defendants further contend that Defendants’ arguments as to the burdens and effects of the LCFS are unripe and premature, and are the subject of Defendants’ Fed.R.Civ.P. 56(d) motion. Defendants move separately for judgment in their favor, arguing that the LCFS does not burden interstate commerce and produces local benefits.

Defendants assert that the Rocky Mountain Plaintiffs provide no evidence of a negative effect on interstate commerce or injury to any of the Rocky Mountain Plaintiffs or their members. Defendants submit that the Midwest ethanol industry is thriving, notwithstanding the LCFS and its application. Defendants suggest that there is no danger of future harm to the Midwest ethanol industry, because it is increasing its efficiency, diminishing its carbon footprint, and therefore, becoming more competitive in California. Finally, Defendants argue that the EPA's approval of E 15, the increasing numbers of flex-fueled vehicles on the road, and the growth of international exports of corn ethanol will expand the non-California ethanol market substantially. Based on these arguments, Defendants oppose the Rocky Mountain Plaintiffs' summary judgment motion, and move for summary judgment in their favor.

To determine the appropriate standard of review, the Court must first consider whether the LCFS overtly discriminates against interstate commerce or impermissibly regulates interstate commerce. If the answer is in the affirmative, then this Court shall address the remaining factors under the strict scrutiny analysis. If the Court finds that the LCFS is nondiscriminatory, then the Court shall address the *Pike* balancing factors to analyze the Rocky Mountain Plaintiffs' dormant Commerce Clause challenge.

C. Strict Scrutiny Analysis

1. Whether the LCFS facially discriminates against interstate commerce

States may not "discriminate against an article of commerce by reason of its origin or destination out of State." *C & A Carbone, Inc. v. Town of Clarkstown*,

N. Y., 511 U.S. 383, 390, 114 S.Ct. 1677, 128 L.Ed.2d 399 (1994). “The central rationale for the rule against discrimination is to prohibit state or municipal laws whose object is local economic protectionism.” *Id.* at 337-38, 114 S.Ct. 1677. A law is facially discriminatory when it “is not necessary to look beyond the text of this statute to determine that it discriminates against interstate commerce.” *Camps Newfound/Owatonna, Inc. v. Town of Harrison*, 520 U.S. 564, 575-76, 117 S.Ct. 1590, 137 L.Ed.2d 852 (1997). In this context “discrimination’ simply means differential treatment of in-state and out-of-state economic interests that benefits the former and burdens the latter.” *Oregon Waste*, 511 U.S. at 99, 114 S.Ct. 1345.

Relying on LCFS § 95486(b) and Table 6, Plaintiffs argue that the LCFS’ discriminatory treatment of physically and chemically identical fuels is reflected on the face of the LCFS. Plaintiffs point out that although corn ethanol produced in California and the Midwest have “identical physical and chemical properties,” ISOR V-30, Table 6 provides lower, more favorable carbon intensity scores for corn ethanol produced in California than corn ethanol produced in the Midwest. As reflected in the table, *supra*, California corn-derived ethanol pathways are assigned 10% lower carbon intensity score as compared to the Midwest counterpart pathways. Plaintiffs contend that this difference reflects “differential treatment of in-state and out-of-state economic interests that benefits the former and burdens the latter.” *Oregon Waste Sys. v. Dep’t of Env’tl. Quality*, 511 U.S. 93, 99, 114 S.Ct. 1345, 128 L.Ed.2d 13 (1994). By assigning a higher carbon intensity score to the Midwest, the LCFS creates an “economic barrier against competition with the products of another state.” *Baldwin v. G.A.F.*

Seelig, Inc., 294 U.S. 511, 527, 55 S.Ct. 497, 79 L.Ed. 1032 (1935).

Plaintiffs point out that the LCFS assigns higher carbon intensity values to corn ethanol “based on . . . [the] location of the production facility.” FSOR at 508. Plaintiffs contend that imposition of a higher carbon intensity score based on the “location of the production facility” constitutes express discrimination against Midwest corn-derived ethanol in favor of California corn ethanol. Moreover, Plaintiffs argue that CARB may not discriminate against out-of-state facilities based on transportation. In creating the LCFS, CARB acknowledged that “the carbon intensities of some California produced fuels . . . benefit from shorter transportation distances.” FSOR at 521. Plaintiffs argue, however, that CARB may not impose a barrier to interstate commerce based on the distance that the product must travel in interstate commerce.

Defendants maintain that the LCFS applies evenhandedly to all ethanol used as a fuel in California. Defendants explain that all ethanol sold as fuel in California will receive a carbon intensity value based on its lifecycle GHG emissions analysis. LCFS § 95483; Scheible Decl., ¶¶ 26, 34-42. In so stating, CARB admits one exception applies to a Midwest ethanol for which a specific source cannot be identified. In that event, the fuel may be assigned the Midwest average carbon intensity value. Scheible Decl., ¶ 39. Defendants explain that for all ethanol pathways, the carbon intensity value is determined by the application of the same scientific modeling tool (CA-GREET). Scheible Decl., ¶¶ 15-25. Defendants conclude that because the LCFS applies the same emissions modeling tool and same regulatory mechanism to all ethanol pathways sold in California,

regardless of origin, the LCFS is not discriminatory on its face.

Having considered the parties' arguments, relevant case law, and admissible evidence, this Court finds that the LCFS and Table 6 explicitly differentiate among ethanol pathways based on origin (Midwest vs. California) and activities inextricably intertwined with origin (electricity provided by Midwest power companies vs. California power suppliers and interstate transportation). When comparing plants with the same feedstock and production process, the LCFS assigns a higher CI on the basis of origin alone. Although California applies the same CA-GREET formula to all pathways evenly, the variables within the formula favor California ethanol producers by assigning lower CI scores based on location. For at least four pathways identified on Table 6 that have identical production processes that create physically and chemically identical ethanol, the Lookup Table assigns a higher score to the ethanol produced in the Midwest and the lower score to the ethanol produced the same way in California. The following table, derived from Table 6, illustrates the comparison:

**Carbon Intensities Assigned to Midwest
and California Corn Ethanol**

Fuel	Fuel Pathway	Assigned Total Carbon Intensity (gCO₂e/MJ)	Difference Between Carbon Intensities for Midwest and California Corn Ethanol (gCO₂e/MJ)
Corn Ethanol	1. Midwest; Dry Mill; Dry DGS; NG	98.40	9.50

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1a. California; Dry Mill; Dry DGS; NG	88.90	—
2. Midwest; Dry Mill; Wet DGS; NG	90.10	9.40
2a. California; Dry Mill; Wet DGS; NG	80.70	—
3. Midwest; Dry Mill; Wet DGS; 80% NG; 20% Biomass	86.80	9.36
3a. California; Dry Mill; Wet DGS; 80% NG; 20% Biomass	77.44	—

Plaintiffs point out that the LCFS assigns Midwest ethanol over 10% higher carbon intensity over its California ethanol counterpart. For example, Midwest; Dry Mill; Dry DGS; NG is assigned a carbon intensity score of 98.40 gCO₂e/MJ, whereas California; Dry Mill; Dry DGS, NG has a score of 88.90 gCO₂e/MJ. The difference—9.50 gCO₂e/MJ—is more than 10% of the value of the California fuel’s assigned carbon intensity. Similar differences appear for the Dry Mill; Wet DGS; NG pathway and the Dry Mill; Wet DGS; 80% NG; 20% Biomass corn-derived ethanol pathway. The LCFS treats Midwest corn-derived ethanol differently than similar corn-derived ethanol made in California. In assigning higher CI scores based on, *inter alia*, the location of the production facility and the distance the product travels, scores that ultimately will affect the price of the product, this Court concludes that the LCFS discriminates against out-of-state corn-derived ethanol on its face.

CARB attributes the difference in carbon intensity values to multiple “scientific” factors that are not based on location. These factors include differences in GHG emissions in transportation and electricity sources. *See* FSOR at 713 (“The carbon intensities of some California-produced fuels do benefit from shorter transportation distances and lower carbon intensity electricity sources.”). Moreover, CARB considers GHG emissions from California inherently lower than Midwest ethanol based on transportation of Midwest ethanol to California. *See* FSOR at 521 (Carbon intensity values “included [GHG] emissions associated with transporting ethanol from the Midwest to 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 producers, will be at least as efficient as Midwestern producers in the use of comparable electricity sources, and will not use coal in their processes. *See* FSOR at 602 (“California biorefineries do not use coal in their operation.”); FSOR at 521 (CARB does not “expect ethanol produced using coal power to be used in California under the LCFS.”). While these factors may not overtly discriminate based on location, they do assign favorable assumptions to California while penalizing out-of-state competitors. California is attempting to stop leakage of GHG emissions by treating electricity generate outside of the state differently than electricity generated inside its border. This discriminates against interstate commerce.⁵ Moreover,

⁵ *See* Cheminsky, et al., “California, Climate Change, and the Constitution,” 25 THE ENVIRONMENTAL FORUM 4, 50, 55 (“If California aims to stop leakage by treating electricity generated outside of the state differently than electricity generated inside its borders, the state will almost certainly lose when facing a

tying carbon intensity scores to the distance a good travels in interstate commerce discriminates against interstate commerce. *See* Tribe, 1 *Am. Constitutional Law* 1109 (3d ed. 000) (Discrimination against an “activity which is essential for an out-of-state enterprise but not essential or a competing local business” is discrimination against interstate commerce.). In addition, the overtly favorable assumptions (although they may be true) related to the electricity powering the plants favors California producers and penalizes out-of-state competitors.

The Court concludes that the LCFS offends the Commerce Clause after considering the unique challenge presented. This is not the quintessential dormant Commerce Clause challenge. Clearly, a law that compels the use of in-state products or forbids the use of out-of-state products would violate the Commerce Clause. *See, Alliance for Clean Coal v. Miller*, 44 F.3d 591, 596 (7th Cir.1995). So, too, would a law that imposes a surcharge on an out-of-state product made in an identical fashion. *See, Oregon Waste*, 511 U.S. at 100, 114 S.Ct. 1345. While the ethanol made in the Midwest and California are physically and chemically identical when ultimately mixed with petroleum, and while the pathways may be the similar, this Court appreciates that the carbon intensities of these two otherwise-identical products are different according to lifecycle analysis. Indeed, the point of the LCFS is to penalize the differences between the California and Midwest ethanol—the

lawsuit based on dormant Commerce Clause grounds. This means that California should avoid making regulatory distinctions between in-state energy and out-of-state energy and create a process that is blind to the location of energy production.”)

carbon emissions from the transportation, the different farming methods used, and the different types of electricity provided to and used by the plants—to reduce emissions. Although CARB’s goal to combat global warming may be “legitimate,” however, it cannot “be achieved by the illegitimate means of isolating the State from the national economy.” *City of Philadelphia v. New Jersey*, 437 U.S. 617, 626, 627, 98 S.Ct. 2531, 57 L.Ed.2d 475 (1978). Defendants admit that in California “there is a price difference between the 90.1 CI corn ethanol and the 98.4 CI corn ethanol.” Waugh Decl. at ¶ 11. Because of the transportation, electricity and other penalties assigned to Midwest corn ethanol will affect the price of the Midwest ethanol in the California market, the LCFS makes the higher CI corn-ethanol undesirable to purchase or use. But the price differential is based on transportation and out-of-state electricity—both factors that discriminate based on location. In addition, the pressure the LCFS puts on out-of-state competitors to reduce its CI score to become equal to those scores in California “make[s] doing business in the state . . . more costly for out-of-state companies relative to in-state firms.” *Biohazard Waste and Gen. Ecology Consultants, Inc. v. Nelson*, 48 F.3d 391, 398 (9th Cir.1995). CARB may not impose a barrier to interstate commerce based on the distance that the product must travel in interstate commerce. *See Dean Milk Co. v. Madison*, 340 U.S. 349, 354 n. 4, 71 S.Ct. 295, 95 L.Ed. 329 (1951) (striking down local requirement that required milk sold in the city to be pasteurized within five miles of the city lines); *see also West Lynn Creamery v. Healy*, 512 U.S. 186, 202, 114 S.Ct. 2205, 129 L.Ed.2d 157 (1994) (“the imposition of a differential burden on any part of the stream of commerce . . . is invalid, because a burden placed at

any point will result in a disadvantage to the out-of-state producer.”). Accordingly, the LCFS discriminates against out-of-state commerce and is subject to strict scrutiny analysis.

The LCFS facially discriminates against interstate commerce notwithstanding the fact that it may also benefit some out-of-state interests or burden some in-state interests. Under the LCFS, Brazilian sugarcane ethanol has a lower CI score than some in-state corn ethanol pathways. Because the LCFS makes production process, feedstock and origin relevant, comparing pathways with different production processes or feedstocks is a red herring. As set forth above, when comparing pathways with the same feedstock and production processes, the LCFS discriminates on the basis of origin. Moreover, a facial discrimination challenge is not defeated simply because other out-of-state interests may benefit. *See Daghlian v. DeVry Univ., Inc.*, 582 F.Supp.2d 1231, 1243-44 (C.D.Cal.2007) (California law’s exception for Hawaiian entities did not defeat facial discrimination claim); *Limbach*, 486 U.S. at 274, 108 S.Ct. 1803 (“explicitly depriv[ing] certain products of generally available beneficial tax treatment because they are made in certain other States” discriminates even though “some out-of-state manufacturers” benefitted). Similarly, while in-state providers are penalized for transporting corn from out-of state, strict scrutiny still applies. “[L]egislation favoring in-state economic interests is facially invalid under the dormant Commerce Clause, even when such legislation also burdens some in-state interests or includes some out-of-state interests in the favored classification.” *Daghlian v. DeVry Univ.*, 582 F.Supp.2d 1231, 1243 (C.D.Cal.2007) (internal quotes omitted).

Moreover, the Method 2A and Method 2B procedures in the LCFS do not alter this Court's conclusion that the LCFS discriminates on its face against out-of-state corn ethanol. Method 2A and Method 2B set forth administrative procedures through which a regulated party may seek to amend the LCFS Lookup Tables to add additional fuel pathways. LCFS § 95486(c)-(f). It is no defense to describe methods that *might* allow amendment of the LCFS in a manner that *might* ameliorate the discriminatory impact of the regulation. Approval of the new pathways is solely within CARB's discretion. Moreover, these methods underscore the discrimination inherent in the CLFS. For example, Defendants treat the "newer" California dry mill ethanol plants presumptively as being more energy efficient than the "mix of more than 100 MidWest plants," resulting in a differential of 3.1 gCO₂e/MJ in favor of California. Scheible Decl. at ¶ 46. By contrast, a Midwest ethanol plant cannot seek to amend its fuel pathway even if it could show that its ethanol plant was as efficient as a newer California plant because the LCFS requires any regulated party to show that its proposal is "at least 5.00 grams CO₂eq/MJ less than the [carbon intensity] for the fuel as calculated under Method 1." LCFS § 95486(e)(2)(A). Accordingly, even these methods treat California ethanol plants more favorably than Midwest plants.

For the foregoing reasons, this Court finds that the LCFS impermissibly discriminates on its face against out-of-state entities.⁶

⁶ Because this Court found that the LCFS discriminates against interstate commerce on its fact, this Court declines to address the Rocky Mountain Plaintiffs' alternative argument related to the alleged discriminatory effects and purpose of the LCFS.

2. Whether the LCFS Controls Extra-territorial Conduct

As an alternative argument, the Rocky Mountain Plaintiffs contend that strict scrutiny also applies to the LCFS if it attempts to “control conduct beyond the boundary of the state.” *Healy v. Beer Inst.*, 491 U.S. 324, 336-37, 109 S.Ct. 2491, 105 L.Ed.2d 275 (1989). Under this doctrine, the “Commerce Clause . . . precludes the application of a state statute to commerce that takes place wholly outside of the State’s borders, whether or not the commerce has effects within the State.” *Edgar v. MITE Corp.*, 457 U.S. 624, 642-43, 102 S.Ct. 2629, 73 L.Ed.2d 269 (1982). The Commerce Clause also forbids a state “statute that directly controls commerce occurring wholly outside the boundaries of a State” as that statute “exceeds the inherent limits of the enacting State’s authority and is invalid regardless of whether the statute’s extra-territorial reach was intended by the legislature.” *Healy*, 491 U.S. at 336, 109 S.Ct. 2491. “The critical inquiry is whether the practical effect of the regulation is to control conduct beyond the boundaries of the State.” *Id.* (citing *Brown-Forman Distillers Corp. v. New York State Liquor Auth.*, 476 U.S. 573, 579, 106 S.Ct. 2080, 90 L.Ed.2d 552 (1986)). This Court evaluates the practical effect of the statute “not only by considering the consequences of the statute itself, but also by considering how the challenged statute may interact with the legitimate regulatory regimes of other States and what effect would arise if not one, but many or every, State adopted similar legislation.” *Id.* “Generally speaking, the Commerce Clause protects against inconsistent legislation arising from the projection of one state regulatory regime into the jurisdiction of another State.” *Id.*

The Rocky Mountain Plaintiffs argue that the LCFS controls conduct that occurs wholly outside of California. The Rocky Mountain Plaintiffs point out that most of the production of corn ethanol occurs entirely outside of California. In addition, that production has no impact on the chemical or physical properties of the corn ethanol ultimately used in California or the tailpipe emissions of motor vehicles that will use the ethanol in California. The Rocky Mountain Plaintiffs contend that, in addition to regulating emissions in California, the ambitious LCFS calibrates CI scores so that they regulate, among other things, deforestation in South America, how Midwest farmers use their land, and how ethanol plants in the Midwest produce animal nutrients. The Rocky Mountain Plaintiffs contend that the LCFS not only regulates the out-of-state production processes for corn ethanol imported into California, but it goes beyond by penalizing corn ethanol producers for their entirely separate business decision to dry distillers grains co-products after the ethanol is produced. Moreover, CARB imposes a substantial penalty—more than 30% of the CI score for corn ethanol—for “indirect land use.” That penalty is used to discourage farmers around the world from converting nonagricultural land into farmland to enter the corn market.

Defendants argue that the Rocky Mountain Plaintiffs rely on the mistaken assertion that the LCFS is “regulating” the activities that it takes into consideration to determine CI values. Defendants explain that the LCFS creates a market-based system which includes a yearly average performance standard and the availability of trading for credits and debits. In-state and out-of-state producers with higher CI values are not required to reduce CI values or to make changes in production or distribution in order to sell

their ethanol in California. Nor are regulated parties prevented from purchasing fuels with higher CI values. Based on this system, Defendants submit, any out-of-state effects are indirect, rather than direct regulations. Moreover, Defendants argue that the Commerce Clause protects the ethanol market, not individual particular interstate firms. Defendants admit that the LCFS structure will shift the market by weakening the position of the higher-CI producers relative to lower-CI producers causing some higher-CI producers may choose to withdraw from the California market. Defendants maintain, however, that these market forces do not regulate commerce outside of California's boundaries.

Ostensibly, the LCFS regulates only fuel-providers in California. This fact, however, does not resolve the issue. Defendants' arguments improperly focus on whether or not the LCFS directly regulates the out-of-state entities. As set forth above, the "critical inquiry is whether the practical effect of the regulation is to control conduct beyond the boundaries of the State." *Healy*, 491 U.S. at 336, 109 S.Ct. 2491. By using the lifecycle analysis approach to reducing GHG emissions, California is attempting to account for-and reduce-emissions from the entire pathway. Differences in CI scores are based on CARB's assessment of Midwest states "[f]arming practices (e.g. frequency and type of fertilizer used); [c]rop yields; [h]arvesting practices; [and] [c]ollection and transportation of the crop." ISOR IV-4 to IV-5. In addition, the LCFS includes a "land use change" component, with higher scores given to the Midwest and Brazil. LCFS § 95486(b); Table 6. According to CARB, the LCFS assigns carbon intensity based on these activities to provide an "incentive for regulated parties to adopt production methods which result in lower emissions."

FSOR at 84. Defendants cannot dispute that the “practical effect” of the regulation would be to control this conduct—occurring wholly outside of California. Indeed, the aim of the LCFS is to change these practices to reduce GHG emissions. But in penalizing these practices to “incentive regulated parties to change” their conduct (including conduct occurring wholly outside of the state), the LCFS impermissibly attempts to “control conduct beyond the boundary of the state.” Healy, 491 U.S. at 336-37, 109 S.Ct. 2491.

Defendants admit that, in enacting the LCFS, “California has essentially assumed legal and political responsibility for emissions of carbon resulting from the production and transport, regardless of location, of transportation fuels actually used in California.” Defs. Mem. In Support of Cross-Motion for Summary Judgment, p. 17. Defendants cannot regulate interstate or foreign commerce occurring outside of California, however, because, under the Commerce Clause, “States and localities may not attach restrictions to . . . imports in order to control commerce in other States.” *Carbone*, 511 U.S. at 393, 114 S.Ct. 1677. Doing so would “extend the [State’s] police power beyond its jurisdictional bounds.” *Id.*; *see also*, *Baldwin v. G.A.F. Seelig, Inc.*, 294 U.S. 511, 55 S.Ct. 497, 79 L.Ed. 1032 (1935). Defendants cannot take “legal and political responsibility” of commerce occurring outside of California, even if the products of that commerce ultimately are sold in California.

Moreover, the LCFS impermissibly regulates the channels of interstate commerce. Before a party can generate credits under the LCFS regulation, for example, it must produce maps and other documentation to prove to CARB how its fuel or feedstock is transported to California. *See* LCFS § 95484(d)(1). Any

“material change” to the transportation—including changes to out-of-state legs of the transportation, such as replacing “rail with truck or ship transport,” LCFS § 95484(d)(2)(D)—must be approved by CARB or else the party loses its right to generate credits. The registration form CARB requires ethanol producers to submit “entails providing facility information that supports the identification of Carbon Intensity (CI) values and an Initial Demonstration of the Physical Pathway (how the fuel arrives to California) for the fuel(s) produced at [the registrant’s] facility.” Dinnen Decl. Exh. 1 (“California Air Resources Board Low Carbon Fuel Standard Biofuel Producer Registration Form”). This Court agrees with Rocky Mountain Plaintiffs that this type of regulation “forc[es] a merchant to seek regulatory approval in one State before undertaking a transaction in another,” causing the LCFS to “directly regulate [] interstate commerce.” *Brown*, 476 U.S. at 582, 106 S.Ct. 2080.

The Court further considers “how the challenged statute may interact with the legitimate regulatory regimes of other States and what effect would arise if not one, but many or every, State adopted similar legislation.” *Healy*, 491 U.S. at 336, 109 S.Ct. 2491. “The purpose of the Commerce Clause is to protect the nation against economic Balkanization.” *Pac. Nw. Venison Producers v. Smitch*, 20 F.3d 1008, 1015 (9th Cir.1994). The Rocky Mountain Plaintiffs submit that the LCFS would Balkanize the ethanol market, because if every state adopted such a regime, they would plainly “interfere[] with free trade” in ethanol and ethanol production. *See Armco, Inc. v. Hardesty*, 467 U.S. 638, 644, 104 S.Ct. 2620, 81 L.Ed.2d 540 (1984). Defendants counter that because the cost of ethanol production and plants is so high, the LCFS would not Balkanize the ethanol production market.

If every State were to adopt legislation based on a lifecycle analysis of fuels, one of two outcomes may occur. First, the ethanol market would become Balkanized, since a producer would have strong incentives to either relocate its operations in the State of largest use, or sell only locally to avoid transportation and other penalties. This would interfere with the “maintenance of a national economic union unfettered by state-imposed limitations on interstate commerce.” *Healy*, 491 U.S. at 335-36, 109 S.Ct. 2491. Second, there is a danger that inconsistent legislation, if adopted by sister states, would cause significant problems to the ethanol market. Ethanol producers and suppliers in any State would be hard-pressed to satisfy the requirements of 50 different LCFS regulations which may required 50 different levels of reductions over 50 different time periods. Moreover, as amicus for the Plaintiffs point out, California’s regulation seeks to reach beyond its borders to interfere with those States’ decisions related to their individual electricity policies. “Generally speaking, the Commerce Clause protects against inconsistent legislation arising from the projection of one state regulatory regime into the jurisdiction of another State.” *Healy*, 491 U.S. at 336, 109 S.Ct. 2491. Based on these considerations, this Court concludes that the LCFS impermissibly controls conduct outside of its borders.

3. Whether the LCFS serves a legitimate local purpose

Once a state law is shown to discriminate against interstate commerce “either on its face or in practical effect,” or to exercise extraterritorial control, the burden falls on the State to demonstrate *both* that the statute “serves a legitimate local purpose,” *and* that

this purpose could not be served as well by available nondiscriminatory means. *Hughes v. Oklahoma*, 441 U.S. 322, 336, 99 S.Ct. 1727, 60 L.Ed.2d 250 (1979); *see also, e.g., Sporhase v. Nebraska ex rel. Douglas*, 458 U.S. 941, 957, 102 S.Ct. 3456, 73 L.Ed.2d 1254 (1982); *Hunt v. Washington State Apple Advertising Comm’n*, 432 U.S. 333, 353, 97 S.Ct. 2434, 53 L.Ed.2d 383 (1977); *Dean Milk Co. v. Madison*, 340 U.S. 349, 354, 71 S.Ct. 295, 95 L.Ed. 329 (1951).

The Rocky Mountain Plaintiffs submit that the LCFS serves no local purpose. They point out that the purported goal is to combat *global* climate change, which serves either a national or international purpose, not a local purpose. The Rocky Mountain Plaintiffs contend that instead of focusing on local GHG emissions, like smog in the Central Valley, the LCFS has a purpose and aim that is broader than its territory.

Defendants argue that the LCFS serves the legitimate and local purpose to reduce the risks of global warming. Defendants’ correctly point out that in *Massachusetts v. EPA*, 549 U.S. 497, 127 S.Ct. 1438, 167 L.Ed.2d 248 (2007), the Supreme Court recognized that a state has a “well-founded desire to preserve its sovereign territory” from the threats of rising seas and other impacts of global warming. *Id.* at 519, 522, 127 S.Ct. 1438. “That these climate-change risks are ‘widely-shared’ does not minimize [California’s] interest” in reducing them. *Id.* at 522, 127 S.Ct. 1438.

Significantly, in *Massachusetts v. EPA*, the Supreme Court held that states have standing to ask the federal government to regulate GHG emissions. 549 U.S. 497, 127 S.Ct. 1438. Nevertheless, the Court explained in dicta that a state has a local and legitimate interest in reducing global warming. Based on this authority, this

Court finds that the LCFS serves a local and legitimate interest.

4. Whether that purpose could be served through other nondiscriminatory means

The final consideration in the strict scrutiny analysis is whether California has established that the goal of reducing global warming cannot be adequately served by nondiscriminatory alternatives. California has failed to establish this fact. While this Court recognizes that the lifecycle analysis is a widely-accepted approach nationally and internationally to reduce GHG emissions, Defendants have failed to establish that they could not achieve this goal through other nondiscriminatory means. The Rocky Mountain Plaintiffs suggest several nondiscriminatory alternatives. For example, an LCFS that does not contain the discriminatory components may be effective in reducing GHG emissions. In addition, Defendants' expert concedes that California could "adopt a tax on fossil fuels" to "reduce greenhouse gas emissions associated with California's transportation sector." Babcock Decl. ¶ 5. Addressing another alternative—regulating only tailpipe GHG emissions in California—Defendants speculate that it "may result in greater. . . [sic] emissions overall," though CARB stated that GHG emissions could be reduced by "increasing vehicle efficiency" or "reducing the number of vehicle miles traveled." FSOR at 74. Although these approaches may be less desirable, for a number of reasons, Defendants have failed to establish there are no nondiscriminatory means by which California could serve its purpose of combating global warming through the reduction of GHG emissions. *See Dean Milk Co. v. City of Madison*, 340 U.S. 349, 71 S.Ct. 295, 95 L.Ed. 329 (1951) (suggesting the use of national

standards or expanding city inspections to achieve health-motivated regulation).⁷

5. Conclusion

Defendants and their amicus defend the use of lifecycle analysis as “internationally recognized,” and the lifecycle factors to be “universally applied.” Defendants further suggest that the federal government could permissibly use a lifecycle analysis approach in federal regulations on carbon intensity. This position highlights the Rocky Mountain Plaintiffs’ challenge. The dormant Commerce Clause enshrines the principle that the federal government can regulate commerce in ways that the States cannot. *See Prudential Ins. Co. v. Benjamin*, 328 U.S. 408, 422, 66 S.Ct. 1142, 90 L.Ed. 1342 (1946). Undoubtedly, the federal government may pass similar legislation if it choose.⁸ In passing the LCFS, however, California impermissibly treads into the province and powers of our federal government, reaches beyond its boundaries to regulate activity wholly outside of its borders, and offends the dormant Commerce Clause.

II. Preemption Claim

A. Introduction

⁷ The Rocky Mountain Plaintiffs further argue that the LCFS would not reduce GHG emissions and that any assertion that it would combat global warming is “mere speculation” and too tenuous. *See, e.g., Granholm v. Heald*, 544 U.S. 460, 125 S.Ct. 1885, 161 L.Ed.2d 796 (2005) (striking down a law prohibiting the sale of wine out-of-state over the Internet to avoid underage drinking was “mere speculation” and too tenuous). This Court does not reach this argument.

⁸ Indeed, the federal government has adopted a lifecycle analysis in its RFS2, part of which is the subject of Plaintiffs’ preemption claim, discussed below.

Rocky Mountain plaintiffs argue that the LCFS stands as an obstacle to the accomplishment of the full purposes and objectives of Congress when it enacted EISA. Rocky Mountain plaintiffs contend that EISA reflects Congress' judgment 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.

Pub.L. 110-140 § 806(a)(4), 121 Stat. 1492, 1722 (2007). Rocky Mountain plaintiffs assert that Congress adopted EISA to serve two purposes: (1) to enhance energy independence and security and to protect pre-existing investment by mandating the use of renewable fuels, and is so mandating; (2) to help the United States contribute to global efforts to reduce GHG emissions. To further those dual goals, Rocky Mountain plaintiffs contend that Congress struck a balance: Biorefineries, including corn ethanol 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 GHG lifecycle emissions by 20%. *See* 42 U.S.C. § 7545(o)(2)(A)(i). Rocky Mountain plaintiffs argue that the LCFS "disrupts Congress' balance by closing California to ethanol produced by more than 150 'grandfathered' biorefineries." In addition, Rocky Mountain plaintiffs contend that the LCFS frustrates EISA's effectiveness. Rocky Mountain plaintiffs point out that in this Court's Motion to Dismiss Order, this Court concluded that if Plaintiffs'

factual allegations were assumed to be true, “implementation of California’s LCFS would ‘frustrate [] the full effectiveness of federal law.’” *Rocky Mountain Farmers Union v. Goldstene*, 719 F.Supp.2d 1170, 1195 (E.D.Cal.2010) (quoting *Perez v. Campbell*, 402 U.S. 637, 652, 91 S.Ct. 1704, 29 L.Ed.2d 233 (1971)). Rocky Mountain plaintiffs maintain that because they rely on the statute, statutory history, and Defendants’ own statements regarding the LCFS, the undisputed evidence establishes that the LCFS frustrates the goals and purposes of EISA and, therefore, is invalid.

Defendants oppose Rocky Mountain plaintiffs’ motion on a number of grounds. Defendants argue first that Rocky Mountain plaintiffs lack standing to pursue their preemption claim. Next, Defendants argue that preemption requires clear Congressional intent to preempt California in the area of air pollution, which does not exist. Third, Defendants contend that the EPA’s approval of E 15 blends fundamentally alters the landscape of plaintiffs’ preemption claim. Fourth, Defendants argue that Plaintiffs produce no evidence of a conflict between the LCFS and RFS2. Fifth, Defendants submit that the Rocky Mountain plaintiffs cannot establish causation. The Court considers the parties’ arguments in turn.

B. Standing

Defendants argue that discovery has revealed that the Rocky Mountain plaintiffs lack standing to pursue their preemption claim. This Court’s Article III jurisdiction “depends on the existence of a ‘case or controversy.’” *GTE California, Inc. v. Federal Communications Commission*, 39 F.3d 940, 945 (9th Cir.1994). “To enforce Article III’s limitation of federal jurisdiction to ‘cases and controversies, Plaintiffs must demonstrate . . . standing. . . .” *Nelson v. National Aeronautics and*

Space Admin., 530 F.3d 865, 873 (9th Cir.2008). To satisfy the Constitution's standing requirement, "a plaintiff must show (1) it has suffered an 'injury in fact' that is (a) concrete and particular-ized and (b) actual or imminent, not conjectural or hypothetical; (2) the injury is fairly traceable to the challenged action of the defendant; and (3) it is likely, as opposed to merely speculative, that there injury will be redressed by a favorable decision." *Friends of the Earth, Inc. v. Laidlaw Envt'l Servs., Inc.*, 528 U.S. 167, 180-81, 120 S.Ct. 693, 145 L.Ed.2d 610 (2000); *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560, 112 S.Ct. 2130, 119 L.Ed.2d 351 (1992); *Nelson v. NASA*, 530 F.3d 865, 873 (9th Cir.2008).

As the parties seeking to invoke federal jurisdiction, Rocky Mountain plaintiffs bear the burden of demonstrating that they have standing in this action. *Lujan*, 504 U.S. at 561, 112 S.Ct. 2130. Rocky Mountain plaintiffs must demonstrate standing "for each claim [they] seek[] to press" and for "each form of relief sought." *DaimlerChrysler Corp. v. Cuno*, 547 U.S. 332, 352, 126 S.Ct. 1854, 164 L.Ed.2d 589 (2006) (quoting *Laidlaw*, 528 U.S. at 185, 120 S.Ct. 693). "The plaintiff bears the burden of proof to establish standing 'with the manner and degree of evidence required at the successive stages of the litigation.'" *Oregon v. Legal Servs. Corp.*, 552 F.3d 965, 969 (9th Cir.2009) (quoting *Lujan*, 504 U.S. at 561, 112 S.Ct. 2130). In addition to these Article III standing requirements, a federal court's exercise of jurisdiction is limited to prudential considerations. *Bennett v. Spear*, 520 U.S. 154, 162, 117 S.Ct. 1154, 137 L.Ed.2d 281 (1997).

The Rocky Mountain plaintiffs 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. This Court has described the Rocky Mountain plaintiffs in its Motion to Dismiss Order:

“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 *1097 are concerned that the LCFS and its impact on gasoline prices will increase the costs of their inputs.

“Corn Ethanol Industry Plaintiffs”

Growth Energy is 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 parties 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.

Rocky Mountain Farmers Union, 719 F.Supp.2d 1170, 1180 (E.D.Cal.2010).

Defendants originally argued that this summary judgment motion should be denied as premature, pursuant to Fed.R.Civ.P. 56(d), because the parties had not yet conducted discovery. In response, this Court allowed Defendants to conduct limited discovery on the issue of standing and to file a supplemental opposition to this motion. Some discovery was conducted. Defendants sent out a set of interrogatories and took the deposition of Robert Dinnen ("Mr. Dinnen"), Chief Executive Officer of, and the Fed.R.Civ.P. 30(b)(6) person most knowledgeable for,

plaintiff Renewable Fuels Association (“RFA”). Defendants then filed a supplemental opposition to this motion, and renewed their Fed.R.Civ.P. 56(d) motion to deny the motion as premature.

The limited discovery conducted on the Rocky Mountain plaintiffs produced limited results. Defendants assert that in their responses to the interrogatories, the “farmer plaintiffs” filed only objections, failing to identify a single plaintiff or plaintiff’s member who had suffered economic injury. The Rocky Mountain plaintiffs dispute this characterization, contending that after the objections were filed, the farmer plaintiffs filed supplemental responses identifying injury. The Rocky Mountain plaintiffs provide no citation to, or quotations from, those responses. Nevertheless, this Court’s review of these documents reveals that the farmer plaintiffs objected on a number of grounds to the interrogatories. In response to each interrogatory, the farmer plaintiffs explained that the question was “not reasonably calculated to lead to the discovery of admissible evidence, as these Responding Plaintiffs are not fuel providers.” The farmer plaintiffs similarly responded to Defendants’ requests for production of documents.

As to the “industry plaintiffs,” Defendants assert that both Growth Energy and RFA failed to identify a single member who had suffered economic injury, claiming that as trade associations, they cannot have this information. RFA argues that it provided the information that it had in response to the interrogatories. RFA agrees that its status as a trade association precludes it from actively seeking out such information from its members. Moreover, RFA submits that it would have disclosed any such information if RFA had any. Growth Energy, on the other hand,

provided a declaration from an outside expert, Stuart Harden (“Mr. Harden”), who received and analyzed confidential business information (provided direction from Growth Energy members, and not provided to other Growth Energy members, officers, or staff) that identified harm to specific members of Growth Energy. Growth energy also provided from its files non-confidential analyses of the adverse impacts it projects the LCFS to have on the U.S. corn ethanol producers in response to defendants’ discovery requests.

The farmer plaintiffs have failed to carry their burden to establish that they have standing to pursue the preemption claim. While this Court does not expect the Rocky Mountain plaintiffs to provide all documents necessary to establish standing as to the farmer plaintiffs, the Rocky Mountain plaintiffs have a burden to establish standing “with the manner and degree of evidence required at the successive stages of the litigation.” *Legal Servs. Corp.*, 552 F.3d at 969 (quoting *Lujan*, 504 U.S. at 561, 112 S.Ct. 2130). At this stage, this Court allowed, and the parties conducted, limited discovery on the standing issue. Thus, as this stage of the litigation, the Rocky Mountain plaintiffs were required to submit some evidence to establish standing. Here, they provided none.

Although the LCFS regulates fuel providers, the farmer plaintiffs were not precluded from asserting standing. “When the plaintiff is not himself the object of the government action or inaction he challenges, standing is not precluded, but it is ordinarily ‘substantially more difficult’ to establish.” *Lujan*, 504 U.S. at 562, 112 S.Ct. 2130 (quoting *Warth v. Seldin*, 422 U.S. 490, 505, 95 S.Ct. 2197, 45 L.Ed.2d 343 (1975)). The farmer plaintiffs could have established

standing. The farmer plaintiffs could establish the injury in fact requirement by showing that “absent the [LCFS], there is a substantial probability that they would [not be injured] and that, if the court affords the relief requested, the [injury] would be removed.” *Warth*, 422 U.S. at 504, 95 S.Ct. 2197. Through their interrogatories, Defendants asked the farmer plaintiffs whether the LCFS has caused or will cause economic injuries to them or their members, including going out of business, losing profits, losing market share, and being unable to obtain financing. Although the questions were not limited to fuel providers specifically, the farmer plaintiffs objected to those questions on the grounds that there were not fuel providers. In addition, although they bear the burden, the farmer plaintiffs provided no evidence to establish standing in response to the Defendants standing challenge. Indeed, the Rocky Mountain plaintiffs appear to concede this point, as the reply papers focus exclusively on the alleged harm to “grandfathered ethanol plants.” None of the farmer plaintiffs appears to be a grandfathered ethanol plant. Accordingly, this Court finds that the farmer plaintiffs lack standing to assert a preemption claim.

The industry plaintiffs argue that they have individual and associational standing. Growth Energy and RFA argue that they LCFS indisputably regulates the GHG emissions their members, “most of whom are grandfathered ethanol plants.” They argue that the LCFS imposes burdens and requires conduct that would not be required in the absence of the regulation; it constrains and conditions members’ ability to sell corn ethanol to California refiners. In addition, Growth Energy and RFA argue that CARB assigns their members a CI score that cannot be altered unless the members affirmatively prove to CARB that a far

lower score should be assigned. The industry plaintiffs submit that these facts are “more than enough” to meet Article III’s standing requirement of a concrete, particularized, and actual or imminent injury.

The industry plaintiffs fail to establish that they have individual standing to pursue the preemption claim. The industry plaintiffs argue that they have standing because they are the “object of the [government] action” at issue. *Lujan*, 504 U.S. at 561, 112 S.Ct. 2130. They argue that “there is ordinarily little question that the [government] action . . . has caused [the plaintiff] injury, and that a judgment preventing . . . the [government] action will dress it.” *Id.* at 561-62, 112 S.Ct. 2130; *see also*, *United States v. City of Arcata*, 629 F.3d 986, 989-90 (9th Cir.2010) (finding standing where plaintiff was “target of the challenged government action” and the challenged action “require[d plaintiffs] to alter their conduct.”) The industry plaintiffs’ own arguments, however, explain why they lack standing. The industry plaintiffs point out that their members—grandfathered ethanol plants—are the target of the LCFS. They also point to the alleged harm to their members. There is no evidence to suggest, however, that the associations are targets of the LCFS. And the industry plaintiffs failed to submit evidence that the association would be injured. Accordingly, the industry plaintiffs lack individual standing to raise the preemption claim.

“Even in the absence of injury to itself, an association may have standing solely as the representative of its members.” *Warth*, 422 U.S. at 511, 95 S.Ct. 2197. To establish associational standing, each industry plaintiffs must establish the following three prongs: (1) its members would otherwise have standing to sue in

their own right; (2) the interests it seeks to protect are germane to the organization's purpose; and (3) neither the claim asserted nor the relief requested requires the participation of individual members in the lawsuit. *Hunt v. Washington State Apple Advertising Commission*, 432 U.S. 333, 343, 97 S.Ct. 2434, 53 L.Ed.2d 383 (1977). Defendants challenge the industry plaintiffs' associational standing on multiple grounds. Defendants argue that the industry plaintiffs fail the first prong, because: (1) the associations have failed to demonstrate that any of their members have suffered an injury in fact; and (2) even if evidence of actual or imminent injury to a specific plant were introduced, plaintiffs would be unable to establish that the LCFS caused any economic injury. Defendants argue that the industry plaintiffs fail the third *Hunt* prong, because the preemption claim requires the participation of individual members in the lawsuit. The Court considers each argument.

The first prong requires the industry plaintiffs to establish the "irreducible constitutional minimum" requirements of injury; namely that at least one of its members:

suffered an "injury in fact"—an invasion of a judicially cognizable interest which is (a) concrete and particularized and (b) actual or imminent, not conjectural or hypothetical; (2) that there be a causal connection between the injury and the conduct complained of—the injury must be fairly traceable to the challenged action of the defendant, and not the result of the independent action of some third part not before the court; and (3) that it be likely, as opposed to merely speculative, that the injury will be redressed by a favorable decision.

Bennett v. Spear, 520 U.S. 154, 167, 117 S.Ct. 1154, 137 L.Ed.2d 281 (1997). To establish associational standing, the industry plaintiffs must “submit affidavits . . . showing, through specific facts . . . that one or more of their members would . . . be ‘directly affected’ by the allegedly illegal activity.” *Summers v. Earth Island Inst.*, 555 U.S. 488, 129 S.Ct. 1142, 1151-52, 173 L.Ed.2d 1 (2009) (quoting *Lujan*, 504 U.S. at 563, 112 S.Ct. 2130).

Although the industry plaintiffs fail to point directly to the specific facts submitted that one or more members of the association may qualify for standing in response to this motion, the Court notes that the record as a whole contains affidavits that contain those facts. For example, the declaration of Stuart H. Harden (“Mr. Harden”), filed on November 1, 2010, in support of the Rocky Mountain plaintiffs’ preliminary injunction motion, concludes that “real and present harm to corn ethanol producers in the Midwest as a result of the LCFS regulations can be demonstrated by the effects on fair value of each of the plants noted herein.” Mr. Harden based his conclusion on confidential business information—filed under seal—from 25 members of Growth Energy. Similarly, the second declaration of Robert Whiteman, filed under seal on May 12, 2011, identifies specific plants and the alleged injuries suffered thereto based on the first quarter of the LCFS. Based on these and other affidavits, this Court is satisfied that the industry plaintiffs satisfy the first prong of the standing inquiry.

Next, the Court considers whether the industry plaintiffs establish the third *Hunt* prong; namely, that “neither the claim asserted nor the relief requested requires the participation of individual members in

the lawsuit.” 432 U.S. at 343, 97 S.Ct. 2434. Although the requested injunctive relief may not require the participation of the individual members, the industry plaintiffs must also establish that the “claim asserted” does not require the participation from individual members. A claim asserted does not require the participation from individual members if it “raises a pure question of law.” *Int’l Union, United Auto., Aerospace, and Agricultural Implement Workers of Am. v. Brock*, 477 U.S. 274, 288, 106 S.Ct. 2523, 91 L.Ed.2d 228 (1986).

Defendants assert that the industry plaintiffs fails to establish that their as-applied preemption claim is a pure question of law. Defendants argue that to establish their claim, Growth Energy and RFA must offer evidence that demonstrates that the LCFS has unlawfully presented an obstacle to the accomplishment of Congressional objectives expressed in RFS2. Plaintiffs argue that the LCFS presents and obstacle to the Congressional objectives by “driving down the demand for grandfathered corn ethanol.” Defendants argue that to prove this alleged conflict, plaintiffs would be required to introduce evidence of how the regulation affects competition in the ethanol industry, generally, and grandfathered plants, specifically. Defendants submit that the industry plaintiffs failed to provide any information about the impact of the LCFS on their members, including specified grandfathered members.

As to RFA, Defendants’ arguments are meritorious. RFA has no access to its members’ business information. RFA failed to identify any of its members as a grandfathered ethanol plant. In addition, RFA failed to establish that any of its members suffered an injury in fact. Thus, RFA would be unable to establish, on its

own, the claim asserted. “Because [RFA] has not identified a single member who was or would be injured by [the challenged action], it lacks standing to raise this challenge.” *Chamber of Commerce of the United States v. EPA*, 642 F.3d 192, 200 (D.C.Cir.2011).

RFA’s “flaw is inconsequential, however, because [RFA’s co-plaintiff] has identified allegedly injured members.” *Id.* As discussed more fully above, the record demonstrates that Growth Energy has submitted declarations that contain the information Defendants identified. Defendants challenge both Growth Energy and RFA, arguing: “Growth Energy and RFA are inappropriate plaintiffs here. The need for individualized proof is unavoidable in this case, yet their refuse to provide evidence on the key issues requiring that proof.” Although Growth Energy disappointingly failed to submit or cite these declarations in this motion, these and other declarations are part of the record, having been filed to support the concurrently-filed preliminary injunction motion. Based on these facts, this Court finds that Growth Energy established associational standing.

C. Substantive Challenges

1. Applicable Law

Rocky Mountain Plaintiffs argue that the LCFS is preempted by EISA, codified in relevant part in Section 211(o), which modified the RF S2. 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. Under the Supremacy Clause, “Congress has the authority, when acting

pursuant to its enumerated powers, to preempt state and local law.” *Oxygenated Fuels v. Davis*, 331 F.3d 665, 667 (9th Cir.2003). When considering the scope of preemption, the Court considers Congressional purpose, which is the “ultimate touchstone of preemption analysis.” *Lorillard Tobacco Co. v. Reilly*, 533 U.S. 525, 541, 121 S.Ct. 2404, 150 L.Ed.2d 532 (2001) (internal quotations omitted).

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, 107 S.Ct. 805, 93 L.Ed.2d 883 (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, 110 S.Ct. 2270, 110 L.Ed.2d 65 (1990). “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, 37 L.Ed.2d 163 (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). 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, 107 S.Ct. 805 (quoting *Hines v. Davidowitz*, 312 U.S. 52, 67, 61 S.Ct. 399, 85 L.Ed. 581 (1941)).

2. Standard of Review

In Defendants’ separate summary judgment motion, Defendants assert that this Court must reject Plain-

tiffs' facial preemption challenge in toto if any provision of the LCFS can be valid under any set of circumstances. "A facial challenge to a [statute] is . . . the most difficult challenge to mount success-fully, since the challenger must establish that no set of circumstances exists under which the [statute] would be valid." *United States v. Salerno*, 481 U.S. 739, 745, 107 S.Ct. 2095, 95 L.Ed.2d 697 (1987). "In particular, a generally applicable statute is not facially invalid unless the statute 'can *never* be applied in a constitutional manner.'" *United States v. Kaczynski*, 551 F.3d 1120, 1124-25 (9th Cir.2009) (quoting *Lanier v. City of Woodburn*, 518 F.3d 1147, 1150 (9th Cir.2008) (drug testing policy not facially invalid because the challenger failed to provide a reason why the policy could not be constitutionally applied to applicants for certain types of jobs)) (emphasis in original).

In opposition, Plaintiffs relied on *Engine Mfrs. Ass'n v. South Coast Air Quality Management Dist.*, 498 F.3d 1031 (9th Cir.2007), in which the Ninth Circuit reversed a district court's decision to find a set of regulations invalid into to because at least one provision of the multi-faceted regulation was valid. According to *Engine Mfrs.*, however, this Court must employ several considerations to determine whether the LCFS is preemption. First, this Court must determine whether the LCFS is a regulation made up of multiple provisions or whether it is a single, unseverable provision. If the LCFS is made up of multiple provisions, then this Court must consider Plaintiffs' preemption challenge as to each provision offending provision separately. If, on the other hand, the LCFS is a single, unseverable provision, this Court must reject the LCFS into to if the offending section of

the LCFS conflicts with Section 211(o). The Ninth Circuit explained:

Where a plaintiff challenges an enactment as prima facie invalid, Salerno requires the plaintiff to show that there can be no valid application of a particular challenged provision. However, Salerno does not require a plaintiff to show that every provision within a particular multifaceted enactment is invalid. When a statute contains unobjectionable provisions that are separable from those found to be unconstitutional, a court reviewing the statute should maintain the statute is no far as it is valid. In other words, some of the provisions might be facially invalid, and might not.

Each Fleet Rule contains multiple provisions, placing restrictions on specific lists of public or private entities. Those provisions within the Rules that constitute state proprietary action are valid provisions, not valid applications of a single, unseverable provision.

498 F.3d at 1049-50 (emphasis in original) (internal quotations and citations omitted). The Court then remanded the action to the district court “to decide in the first instance whether the remaining provisions of the [regulation] are preempted by the Clean Air Act.” *Id.*

Neither party addresses this standard in their separate motions. In their separate summary judgment motion, Defendants failed to establish that the LCFS is valid in toto because some provisions of the LCFS do not conflict with Section 211(o). In this motion, Defendants fail to isolate the offending portions of the LCFS. Neither party addresses the

issue of severability. Neither party explains sufficiently their position of whether the LCFS is a series of severable restrictions on dissimilar entities or single, integrated market-based compliance mechanism that applies to all fuel providers in the California market.

In a footnote under the Commerce Clause challenge arguments, the Rocky Mountain Plaintiffs assert that in Defendants' separate summary judgment motion, Defendants mischaracterize Rocky Mountain Plaintiffs' "facial discrimination" claim as a "facial challenge." A law is facially discriminatory, as opposed to facially nondiscriminatory, when "it is not necessary to look beyond the text of this statute to determine that it discriminates against interstate commerce." *Camps Newfound/Owatonna, Inc. v. Town of Harrison*, 520 U.S. 564, 575-76, 117 S.Ct. 1590, 137 L.Ed.2d 852 (1997). A challenge is facial, as opposed to as-applied, when the "claim and the relief that would follow . . . reach beyond the particular circumstances" of the plaintiffs. *Doe v. Reed*, 561 U.S. 186, 130 S.Ct. 2811, 2817, 177 L.Ed.2d 493 (2010).

The characterization of the challenge is important to understand the appropriate standard of review. Defendants oppose the Rocky Mountains' facial discrimination claim under the Commerce clause in this action, whereas they oppose Plaintiffs' "facial challenge" to the preemption claim in their separate motion. In this motion, Defendants oppose an "as applied" preemption challenge in opposition to this motion. The Rocky Mountain Plaintiffs fail to address whether their preemption challenge is facial or as applied and make no attempt to set forth the applicable standard of review for either. Thus, the parties' arguments are, at times, like two ships passing in the night.

This Court cannot determine the merits of the preemption claim until the parties brief further the standard of review. For failing to set forth an applicable standard of review, the Rocky Mountain Plaintiffs have failed to establish that they are entitled to judgment as a matter of law on this claim. Accordingly, this Court DENIES without prejudice the Rocky Mountain Plaintiffs' summary judgment motion related to its preemption claim.⁹

PRELIMINARY INJUNCTION MOTION STANDARD OF REVIEW

A “preliminary injunction is an extra-ordinary and drastic remedy.” *Munaf v. Geren*, 553 U.S. 674, 128 S.Ct. 2207, 2219, 171 L.Ed.2d 1 (2008). As such, the Court may only grant such relief “upon a clear showing that the plaintiff is entitled to such relief.” *Winter v. Nat’l Res. Def. Council, Inc.*, 555 U.S. 7, 129 S.Ct. 365, 375, 172 L.Ed.2d 249 (2008). To prevail, the moving party must show: (1) a likelihood of success on the merits; (2) a likelihood that the moving party will suffer irreparable harm absent a preliminary injunction; (3) that the balance of equities tips in the moving party’s favor; and (4) that an injunction is in the public interest. *Id.* at 374. In considering the four factors, the Court “must balance the competing claims of injury and must consider the effect on each party of the granting or withholding of the requested relief.” *Winter*, 129 S.Ct. at 376 (quoting *Amoco Co. v. Vill. of Gambell, Alaska*, 480 U.S. 531, 542, 107 S.Ct. 1396, 94 L.Ed.2d 542 (1987)); *Indep. Living Ctr. of S. Cal., Inc.*

⁹ Additionally, resolution of this issue, if re-filed, may require further briefing on the issue of its impact on the grandfathered ethanol plants in light of EPA’s change from E10 to E15 during the pendency of this motion.

v. Maxwell-Jolly, 572 F.3d 644, 651 (9th Cir.2009). Alternative, a “preliminary injunction is appropriate when a plaintiff demonstrates . . . that serious questions going to the merits were raised and the balance of hardships tips sharply in the plaintiff’s favor.” *Alliance for the Wild Rockies v. Cottrell*, 632 F.3d 1127 (9th Cir.2011).

DISCUSSION

Likelihood of Success on Merits

Pursuant to *Winter*, Plaintiffs must make a “clear showing” that they are “likely to succeed on the merits.” 129 S.Ct. at 375-76; *Stormans, Inc. v. Selecky*, 571 F.3d 960, 978 (9th Cir.2009). For the reasons set forth above, this Court found that the LCFS violates the Commerce Clause. In addition, this Court finds the Rocky Mountain Plaintiffs’ preemption claim raises “serious questions” as to whether the LCFS conflicts with Section 211(o) of the Clean Air Act. Accordingly, this factor strongly favors injunctive relief.

Irreparable Injury Absent an Injunction

Next, the Court considers whether Plaintiffs will suffer irreparable injury absent an injunction. “Preliminary injunctive relief is available only if plaintiffs ‘demonstrate that irreparable injury is *likely* in the absence of an injunction.’” *Johnson v. Couturier*, 572 F.3d 1067, 1081 (9th Cir.2009) (quoting *Winter*, 129 S.Ct. at 375) (noting that the Supreme Court in *Winter* rejected the Ninth Circuit’s “possibility of irreparable harm” test). “Typically, monetary harm does not constitute irreparable harm.” *Cal. Pharmacists Ass’n v. Maxwell-Jolly*, 563 F.3d 847, 851 (9th Cir.2009). “Economic damages are not traditionally considered irreparable because the injury *can later be remedied by a damage award*.” *Id.*

at 852 (emphasis in original). However, constitutional violations are presumptively irreparable. *Monterey Mech. Co. v. Wilson*, 125 F.3d 702, 715 (9th Cir.1997). When “an alleged deprivation of a constitutional right is involved, most courts hold that no further showing of irreparable injury is necessary.” 11A Wright, et al., *Federal Practice & Procedure*, 2948.1, pp. 160-61 (1995). In addition, Commerce Clause violations cause irreparable injuries and entitle a party to equitable relief. *See American Libraries Ass’n v. Pataki*, 969 F.Supp. 160, 168 (S.D.N.Y.1997) (commerce clause). Because this Court found the LCFS to violate the Commerce Clause, the application of the LCFS to the Rocky Mountain Plaintiffs would cause the irreparable Constitutional harm. Accordingly, this factor strongly favors injunctive relief.

Harm to Defendants/Balance of Equities

The purpose of a preliminary injunction is to preserve the status quo if the balance of equities so heavily favors the moving party that justice requires the court to intervene to secure the positions until the merits of the action are ultimately determined. *University of Texas v. Camenisch*, 451 U.S. 390, 395, 101 S.Ct. 1830, 68 L.Ed.2d 175 (1981). According to Plaintiffs, “status quo” means the last uncontested status that preceded the pending controversy. *See, GoTo.com, Inc. v. Walt Disney Co.*, 202 F.3d 1199, 1210 (9th Cir.2000). In this case, this Court cannot preserve the status quo, since the LCFS came into force on January 1, 2011, after these motions were filed but before the parties finished briefing these motions and before these motions were resolved. Because the LCFS is incremental, however, this Court can preserve the status quo to enjoin defendants from enforcing the LCFS further.

Defendants are concerned that failure to enforce the LCFS will harm the public by increasing GHGs. The Rocky Mountain Plaintiffs counter that those concerns are too attenuated within this context. In addition, the Rocky Mountain Plaintiffs submit that the LCFS will cause real, concrete harm to the United States ethanol industry that tips the balance of equities in their favor. This Court agrees.

Public Interest

As a final factor, the Court considers the public interest. “In exercising their sound discretion, courts of equity should pay particular regard for the public consequences in employing the extraordinary remedy of injunction.” *Winter*, 129 S.Ct. at 376-77 (quoting *Weinberger v. Romero-Barcelo*, 456 U.S. 305, 312, 102 S.Ct. 1798, 72 L.Ed.2d 91 (1982)). “The public interest analysis for the issuance of a preliminary injunction requires [the Court] to consider whether there exists some critical public interest that would be injured by the grant of preliminary relief.” *Indep. Living*, 572 F.3d at 659. Here, the public has an interest in protecting Constitutional rights. That is, it is in the public interest to enjoin enforcement of a state regulation that offends federal law. California also argues that the public has an interest to enforce a regulation that would reduce GHG emissions. This Court agrees, but only if the enforcement is done legally. Such is not the case here. Accordingly, this factor narrowly tips in favor of enforcement.

Conclusion

As set forth above, Plaintiffs make a “clear showing” that they are likely to succeed on the merits of dormant Commerce Clause claim and their preemption claim raises “serious questions” as to whether the

LCFS conflicts with Section 211(o) of the Clean Air Act. In addition, the Rocky Mountain Plaintiffs establish that they are suffering irreparable harm. Having considered the public's interest, the balance of equities, and other relevant factors, and for the reasons set forth above, this Court grants the Rocky Mountain Plaintiffs' preliminary injunction motion.

CONCLUSION AND ORDER

For the foregoing reasons, this Court:

1. GRANTS judgment in favor of the Rocky Mountain Plaintiffs and DENIES Defendants' summary judgment motion on the Rocky Mountain Plaintiffs' dormant Commerce Clause claim. Using a strict scrutiny analysis, this Court finds that the LCFS discriminates against out-of-state corn-derived ethanol while favoring in-state corn ethanol and impermissibly regulates extraterritorial conduct. In addition, Defendants have failed to establish that there are no alternative methods to advance its goals of reducing GHG emissions to combat global warming;
2. DENIES judgment without prejudice on the Rocky Mountain Plaintiffs' preemption claim for failure to address the standard of review;
3. DENIES as moot Defendants' Fed.R.Civ.P. 56(d) motion, because this Court does not reach the subject of that motion;
4. GRANTS the Rocky Mountain Plaintiffs motion for a preliminary injunction;
5. ENJOINS Defendants from further enforcing the LCFS during the pendency of this litigation; and

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6. CERTIFIES judgment on Plaintiffs' dormant Commerce Clause claim pursuant to Fed.R.Civ.P. 54(b), even though there is an outstanding claim for relief based on the claim of preemption. Because the LCFS is unenforceable in that it violates the Commerce Clause, there is no just reason for delay in these proceedings; and
7. DIRECTS the clerk of court to enter judgment in favor of the Rocky Mountain Plaintiffs and against Defendants on the Plaintiffs' dormant Commerce Clause claim.

IT IS SO ORDERED.

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APPENDIX C

UNITED STATES DISTRICT COURT
E.D. CALIFORNIA

Nos. CV-F-09-2234 LJO DLB
CV-F-10-163 LJO DLB

ROCKY MOUNTAIN FARMERS UNION, REDWOOD COUNTY
MINNESOTA CORN AND SOYBEAN GROWERS, PENNY
NEWMAN GRAIN, INC., GROWTH ENERGY, RENEWABLE
FUELS ASSOCIATION, REX NEDEREND, FRESNO COUNTY
FARM BUREAU, NISEI FARMERS LEAGUE, AND
CALIFORNIA DAIRY CAMPAIGN,
Plaintiffs,

v.

JAMES N. GOLDSTENE, EXECUTIVE OFFICER OF THE
CALIFORNIA AIR RESOURCES BOARD,
Defendant.

NATIONAL PETROCHEMICAL & REFINERS ASSOCIATION,
AMERICAN TRUCKING ASSOCIATIONS,
CENTER FOR NORTH AMERICAN ENERGY SECURITY,
AND THE CONSUMER ENERGY ALLIANCE,
Plaintiffs,

v.

JAMES GOLDSTENE, EXECUTIVE OFFICER
OF THE CALIFORNIA AIR RESOURCES BOARD,
MARY D. NICHOLS, DANIEL SPERLING, KEN YEAGER,
DORENE D'ADAMO, BARBARA RIORDAN,
JOHN R. BALMES, LYDIA H. KENNARD, SANDRA BERG,
RON ROBERTS, RONALD O. LOVERIDGE, MEMBER
OF THE CALIFORNIA AIR RESOURCES BOARD; ARNOLD
SCHWARZENEGGER, GOVERNOR OF THE STATE OF

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CALIFORNIA, AND EDMUND BROWN, ATTORNEY
GENERAL OF THE STATE OF CALIFORNIA,
Defendants.

AND RELATED INTERVENOR ACTIONS AND AMICI.

Dec. 29, 2011

ORDER ON NPRA PLAINTIFFS' SUMMARY
ADJUDICATION MOTION (DOC. 125)

LAWRENCE J. O'NEILL, District Judge.

INTRODUCTION

Plaintiffs National Petrochemical & Refiners Association, American Trucking Associations, the Center for North American Energy Security, and the Consumer Energy Alliance (collectively "Plaintiffs" or "National Petrochemical Plaintiffs") move for summary adjudication pursuant to Fed.R.Civ.P. 56 that the California's Low Carbon Fuel Standard, Cal.Code Regs. tit. 17. §§ 95480-95490 ("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. Health &

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. Defendants shall be referred to collectively as "Defendants" or "CARB."

Saf.Code, § 38500 et seq., is unconstitutional.² In this summary adjudication motion, the National Petrochemical Plaintiffs contend that the LCFS violates the dormant Commerce Clause because it: (1) impermissibly discriminates in favor of California corn ethanol and against Midwest corn ethanol; (2) impermissibly discriminates in favor of California crude oil and against crude oils from outside of California; and (3) impermissibly regulates interstate and foreign commerce based on a fuel’s “pathway,”—i.e., its production and transport—that occurs outside of California.

Defendants oppose this motion by arguing that the LCFS applies evenhandedly to all ethanol pathways, does not discriminate in the crude oil market, and does not regulate extraterritorial activity directly.³ In addition, Defendants contend that certain arguments are unripe for adjudication.

Having considered the parties’ arguments and relevant legal authority, this Court finds that the LCFS discriminates against out-of-state and foreign crude oil while giving an economic advantage to in-state crude oil. As explained in a separate order on the subject, this Court further agrees with the National Petrochemical Plaintiffs that the LCFS discriminates against out-of-state corn ethanol and impermissibly controls extraterritorial conduct. Moreover, Defendants fail to establish that no alternative means exist to address their legitimate

² National Petrochemical Plaintiffs also claim that the LCFS is preempted by federal law. The National Petrochemical Plaintiffs do not address their preemption claim in this motion.

³ Defendants separately move for summary judgment, arguing that 42 U.S.C. § 7545(c)(4)(B) (“Section 211(c)(4)(B)”) authorizes California to violate the dormant Commerce Clause. This Court rejects this notion in a separate order.

concerns of combating global warming. Because the LCFS discriminates against interstate and foreign commerce, and because Defendants failed to satisfy their burden to establish the absence of adequate alternatives, this Court finds that the LCFS violates the dormant Commerce Clause. Accordingly, this Court GRANTS the National Petrochemical Plaintiffs' summary adjudication motion.

BACKGROUND

Introduction

In enacting the Global Warming Solutions Act of 2006, AB 32, the California Legislature found, *inter alia*: "Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California." Cal. Health & Saf.Code, § 38501. AB 32 set the goal of reducing greenhouse gas ("GHG") emissions in California to 1990 levels by the year 2020. To attain these goals, AB 32 charged CARB to develop and implement regulations in a number of areas.

In January 2007, California's Governor issued Executive Order S-01-07 ("Executive Order"), setting a statewide goal to "reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020." In the Executive Order, the Governor called on CARB to "determine if [a low carbon fuel standard] can be adopted as a discrete early action measure pursuant to AB 32." *Id.* In June 2007, CARB adopted the LCFS as an early action measure. Public workshops on the issue, formal rulemaking procedures following, culminated in the final adoption of the regulation in April 2010. Cal.Code Regs. tit. 17, §§ 95480-95490. Plaintiffs challenge the LCFS regulations in this action.

LCFS

The purpose of the LCFS is “to implement a low carbon fuel standard, which will reduce greenhouse gas emissions by reducing the full fuel-cycle, carbon intensity of the transportation fuel used in California.” LCFS § 95480. The LCFS was “designed to reduce California’s dependence on petroleum” and “to stimulate and the production and use of alternative, low-carbon fuels in California.” CARB, *Final Statement of Reasons* (“FSOR”) at 457; FSOR at 461 (“One of the key advantages of the LCFS . . . is that it reduces our dependence on foreign oil.”). In preparing the LCFS, CARB identified several “impacts” the regulation would have, including:

Biofuels will displace some percent of petroleum-based transportation fuels.

* * *

Reducing the volume of transportation fuels that are imported from other states will reduce foreign imports of oil into the U.S.

* * *

The biorefineries to be built in the States will provide needed employment, an increased tax base for the States, and value added to the biomass used as feedstock. These benefits will be more important in rural areas of the State that are short on employment but rich in natural resources.

Displacing important transportation fuels with biofuels produced in the State keeps more money in the States.

FSOR 479. CARB estimated that under the LCFS, “[u]p to eighteen cellulosic ethanol and six corn

ethanol plants could be built [in California] by 2020 with a total annual capacity of 1.2 billion gallons.” FSOR at 419. “The estimated capital investment for these new businesses is approximately \$8.5 billion . . .” FSOR at 420. CARB estimates that the LCFS will reduce emissions from the transportation sector by about 16 million metric tons in 2020. CARB, *Initial Statement of Reasons* (“ISOR”) at ES-1.

The LCFS regulates transportation fuels that are “sold, supplied, or offered for sale in California” and “any person, who as a regulated party . . . is responsible for a transportation fuel in a calendar year.” LCFS § 95480.1(a). California’s LCFS focuses on the “carbon intensity” of fuels to estimate emissions related to a fuel’s lifecycle, including GHGs emitted when the fuel is extracted, refined, and transported to 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. *See* LCFS § 95482(b), (c). 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 were mandated to begin in 2011, with the reduction requirement increasing through the 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

“Carbon intensity is not an inherent chemical property of a fuel, but rather it is a reflective of the process in making, distributing, and using that fuel.” FSOR at 951. The “LCFS contains no requirements that dictate the exact composition of compliant transportation fuels.” FSOR at 442. The LCFS does “not set[] a fuel standard,” and it does not “establish any motor-vehicle specifications.” FSOR at 439, 442.

A gallon of ethanol made from corn grown and processed in the Midwest will, under a 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, corn ethanol from the Midwest will have different carbon intensity than the sugar cane ethanol from Brazil.

ISOR V-30.

Carbon intensity is defined as “the amount of life-cycle greenhouse gas emissions, per unit of energy of fuel delivered, expressed in grams of carbon dioxide per megajoule. [sic] LCFS § 95481(a) (11). “Lifecycle greenhouse gas emissions” are defined 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 pro-

duction 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 § 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 § 95481(a)(28). 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.

CARB-Assigned Corn Ethanol Carbon Intensity Values

The LCFS has assigned carbon intensity scores for gasoline and gasoline substitutes, embodied in the Table 6 of LCFS § 95486(b), titled “Carbon Intensity Lookup Table for Gasoline and Fuels that Substitute for Gasoline” (“Table 6”). CARB, through Table 6, assigns different carbon intensity scores to different gasoline and gasoline substitutes, including gasoline, ethanol from corn, ethanol from sugarcane, compressed natural gas, liquified natural gas, electricity, and hydrogen. These carbon intensity values set a 2010 baseline carbon intensity value to each of the fuels and pathways. Within the “ethanol from corn” section, more than a dozen “pathways” are identified, each assigned a carbon intensity value. Numerous distinctions are drawn among different categories of corn ethanol producers.

Plaintiffs argue that the LCFS discriminates against out-of-state ethanol producers on its face, because the LCFS assigns more favorable carbon intensity values to California corn-derived ethanol than to Midwest corn-derived ethanol. The relevant section of Table 6 assigns the following values to the different corn-ethanol pathways:

Pathway Description	Carbon Intensity Values 9gCo2e/MJ)		
	Direct Emissions	Land Use or Other Indirect Effect	Total
Midwest Average; 80% Dry Mill; 20% Wet Mill; Dry DGS	69.40	30	99.4 0
California average; 80% Midwest Average; 20 % California, Dry Mill; Wet DGS; NG	65.66	30	95.66
California; Dry Mill; Wet SGS; 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
Midwest; Wet Mill, 100% NG	64.52	30	94.52
Midwest; Wet Mill, 100% Coal	90.99	30	120.99
Midwest; Dry Mill, Wet, DGS	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, Dry DGS; 80% NG; 20% Biomass	56.80	30	86.80

144a

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

The LCFS assigns carbon intensity scores for corn ethanol based on the “location of the production facility (California or Midwest),” the “type of corn milling (wet or dry),” the “type of distillers grains produced (wet or dry), and the “source of fuel for heat energy and co-generated electrical power (natural gas, coal, biomass).” FSOR at 508. Plaintiffs contend that Table 6 impermissibly discriminates against Midwest corn ethanol producers and favors California corn ethanol producers. From Table 6, Plaintiffs derive the following table:

Carbon Intensities Assigned to Midwest
and California Corn Ethanol

Fuel	Fuel Pathway	Assigned Total Carbon Intensity (gCO ₂ e/MJ)	Difference Between Carbon Intensities for Midwest and California Corn Ethanol (gCO ₂ e/MJ)
Corn Ethanol	Midwest; Dry Mill; Dry DGS; NG	98.40	9.50
	1a. California; Dry Mill; Dry DGS; NG	88.90	—
	2. Midwest; Dry Mill; Wet DGS; NG	90.10	9.40
	2a. California; Dry Mill; Wet DGS; NG	80.70	—
	3. Midwest; Dry Mill; Wet DGS; 80% NG; 20% Biomass	86.80	9.36

3a. California; Dry Mill; Wet DGS; 80% NG; 20% Biomass	77.44	—
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From this data, Plaintiffs point out that the LCFS assigns Midwest ethanol over 10% higher carbon intensity over its California ethanol counterpart. For example, Midwest; Dry Mill; Dry DGS; NG is assigned a carbon intensity score of 98.40 gCO₂e/MJ, whereas California; Dry Mill; Dry DGS, NG has a score of 88.90 gCO₂e/MJ. The difference—9.50 gCO₂e/MJ—is more than 10% of the value of the California fuel’s assigned carbon intensity. Similar differences appear for the Dry Mill; Wet DGS; NG pathway and the Dry Mill; Wet DGS; 80% NG; 20% Biomass corn-derived ethanol pathway.

CARB attributes the difference in carbon intensity values to multiple factors, including differences in GHG emissions in transportation and electricity sources. *See* FSOR at 713 (“The carbon intensities of some California-produced fuels do benefit from shorter transportation distances and lower carbon intensity electricity sources.”). CARB considers GHG emissions from California inherently lower than Midwest ethanol based on transportation of Midwest ethanol to California. *See* FSOR at 521 (Carbon intensity values “included [GHG] emissions associated with transporting ethanol from the Midwest to 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 producers, will be at least as efficient as Midwestern producers in the use of comparable electricity sources, and will not use coal in their processes. *See* FSOR at 602 (“California biorefineries do not use coal in their operation.”);

FSOR at 521 (CARB does not “expect ethanol produced using coal power to be used in California under the LCFS.”).

Customized Carbon Intensity Values and Pathways

In addition to the default assigned values contained in Table 6, CARB provides two methods for a facility to apply for a customized total carbon intensity value. *See* LCFS § 95486(c), (d). Under these mechanisms—named Method 2A and Method 2B in the LCFS—a facility may show that it has more efficient equipment or uses cleaner electricity to gain an individualized carbon intensity value. Under these methods, a facility may also propose its own pathway. “Producers whose energy use data are different from the values used in the development of the fuel pathways or producers whose process deviates substantially from that of the pathways represented in [Table 6] can propose their own pathways according to Methods 2A and 2B.” FSOR at 508.

CARB submits that to date, 44 Midwest corn ethanol facilities have registered for pathways in Table 6, with 25 indicating that they can produce ethanol lower than the 2010 baseline assigned in Table 6. Five Midwest corn ethanol facilities have applied under Method 2A and Method 2B, with a total of 22 pathways, all of which tentatively have been granted a rating lower than the value for the 2010 baseline for that pathway. Moreover, to date, three facilities that are Midwest; Dry Mill, Dry DGS, NG have applied under Method 2A for an individualized carbon intensity value, and tentatively have been given a value lower than the 2010 baseline for California gasoline.

Crude Oil Carbon Intensity Values

California's LCFS also regulates crude oil through the assignment of carbon intensity values. The system of determining CI values for crude oil differs from the CI determination of ethanol. CARB asserts that the crude oil methodology was designed to ensure that GHG emissions from petroleum-based fuels do not increase dramatically under the LCFS and that emissions reductions would come from increased use of lower carbon alternative fuels. Under the LCFS, no credits can be generated from crude oil-derived fuels since they are all assigned the CARBOB⁴ CI value or higher.

CARB submits that determination of crude oil's carbon intensity under the LCFS depends on two factors, neither of which depends on location. First, the LCFS considers whether the crude oil is a high carbon intensity crude oil ("HCICO"). An HCICO is defined as a crude oil with a CI value for extraction and transportation greater than 15.00 gCO₂e/MJ. Scheible Decl., ¶ 95. HCICOs generate nearly twice as many emissions as the baseline average CI from extraction and transportation, according to CARB. Scheible Decl., ¶¶ 94-95.

If the crude oil is an HCICO, then the LCFS differentiates based on whether it is an "emerging fuel" or an "existing crude source." "The LCFS differentiates between crude oil sources that were used in significant quantities in California in 2006 (e.g. 'included in the 2006 California baseline crude mix') and those crude sources that were not used in

⁴ CARBOB is California's reformulated gasoline blendstock for oxygenate blending. It is the feedstock to which ethanol is added to produce gasoline.

significant quantities in 2006.” FSOR at 233. “The two percent threshold is designed to differentiate established crude sources that made up a significant fraction of the California crude oil supply in 2006 from potential emerging crude sources that could be a significant part of the crude supply in the future[.]” FSOR at 24. Crude oils that made up less than 2% of the 2006 baseline crude mix are classified as “emerging crude sources.” FSOR at 24. Those crude oil sources that made up more of the 2% California crude market in 2006 are “existing crude sources.”

The LCFS requires emerging crude sources to be “evaluated individually” “to ensure that increased use of ‘high carbon intensity crude oil’ production methods are accurately accounted for within the regulation.” FSOR at 235. Parties seeking to introduce HCICOs from outside California—from sources such as Canada or Venezuela—are required to demonstrate “that the carbon intensity for crude production and transport has been reduced to no more than 15.00 gCO₂e/MJ—through technologies such as carbon capture and sequestration.” FSOR at 24; LCFS § 95486(b)(2)(A)(2)(a)(ii). If a regulated party meets that burden, then the HCICO “would qualify for the default carbon intensity values based on overall averages.” FSOR at 24. If not, then “the actual carbon intensity from production and transport of the crude would have to be used.” *Id.* Plaintiffs note that California crude oil produced using thermal enhanced oil recovery processes (“TEOR”) is the only HCICO that “qualifies for the default average carbon intensity values.” FSOR at 22.

By contrast, existing HCICOs—and all other existing crude sources that were within the 2006 California baseline mix—are assigned a single average baseline

CI value. LCFS § 95486(b)(2) (A); FSOR at 23. Under the LCFS, “regulated parties must use these single carbon intensity values for all California CARBOB and diesel fuel regardless of the actual carbon intensity of producing or transporting the specific crude oil use, or the specific refinery operations.” FSOR at 23; *see also*, LCFS § 95486(b)(2)(A)(1).

Under this regime, Defendants admit that the use of new sources of HCICO would produce deficits, making it unlikely that California will see a significant increase in new HCICO use. According to Defendants, the LCFS was designed to discourage emerging HCICO use, since an increase in HCICOs would be counterproductive to the LCFS’ objectives to reduce GHG emissions. Scheible Decl., ¶¶ 88-98. Credits must come from lower carbon alternatives to petroleum, the development of which is the primary objective of the LCFS. *Id.*

The National Petrochemical Plaintiffs argue that the LCFS treats crude oil from California more favorably than crude oil from outside of California in two respects. First, Plaintiffs argue that the LCFS discriminates against emerging crude sources of HCICO by treating them less favorably than HCICO from California. Second, the LCFS requires that all existing crude sources be assigned the same carbon intensity value even though, according to Defendants, HCICO from California has a higher carbon intensity than other low carbon intensity crude oils from Alaska and foreign countries. In both cases, the National Petrochemical Plaintiffs submit, the LCFS provides less favorable treatment for crude oils from outside California and from foreign countries.

JUDICIAL NOTICE, OBJECTIONS,
AND CONSIDERATION OF EVIDENCE
AND ARGUMENTS

In addition to the pending motion, the parties have submitted requests for judicial notice, objections to evidence submitted, motions to strike, and other miscellany. Moreover, this Court has received multiple amici curiae briefs. This Court carefully reviewed and considered the record, including all evidence, arguments, points and authorities, declarations, testimony, statements of undisputed facts and responses thereto, objections and other papers filed by the parties. Omission of reference to evidence, an argument, document, objection or paper is not to be construed to the effect that this Court did not consider the evidence, argument, document, objection or paper. This Court thoroughly reviewed, considered and applied the evidence it deemed admissible, material and appropriate for summary judgment. This Court does not rule on objections in a summary judgment context, unless otherwise noted.

Moreover, this Court will not address the request for judicial notice specifically, but notes the following applicable standards. To be judicially noticeable, 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 appropriate for records and reports of administrative bodies.” *United States v. 14.02 Acres of Land More or Less in Fresno County*, 547 F.3d 943, 955 (9th Cir.2008). This Court may not take judicial notice, however, of documents filed with an administrative agency to prove the truth of the contents of the

documents. The comments made by third parties that are included in the ISOR or FSOR are subject to hearsay objections, and do not rise to the “high degree of indisputability” required for judicial notice for their truth. *Jespersen v. Harrah’s Operating Co.*, 444 F.3d 1104, 1110 (9th Cir.2006) (citing Fed.R.Evid. 201 advisory committee’s note). If cited, these statements may be considered for their existence, but not their truth. *Id.* In addition, this Court takes judicial notice of public records not subject to reasonable dispute. *See Hennessy v. Penril Datacomm Networks, Inc.*, 69 F.3d 1344, 1354-55 (7th Cir.1995) (court properly refused to take judicial notice of corporation’s SEC form to determine disputed fact because “its contents were subject to dispute”). While this Court may take judicial notice of the legislative histories, the statements contained therein may be subject to dispute.

STANDARD OF REVIEW

Fed.R.Civ.P. 56 permits a “party against whom relief is sought” to seek “summary judgment on all or part of the claim.” In a summary judgment motion, a court must decide whether there is a “genuine issue as to any material fact.” Fed.R.Civ.P. 56(c); *see also*, *Adickes v. S.H. Kress & Co.*, 398 U.S. 144, 157, 90 S.Ct. 1598, 26 L.Ed.2d 142 (1970). A party seeking summary judgment/adjudication bears the initial burden of establishing the absence of a genuine issue of material fact. *See Celotex Corp. v. Catrett*, 477 U.S. 317, 323, 106 S.Ct. 2548, 91 L.Ed.2d 265 (1986). The moving party may satisfy this burden in two ways: (1) by presenting evidence that negates an essential element of the nonmoving party’s case; or (2) by demonstrating that the nonmoving party failed to make a showing of sufficient evidence to establish an essential element of the nonmoving party’s claim, and on which the non-

moving party bears the burden of proof at trial. *Id.* at 322. “The judgment sought should be rendered if the pleadings, the discovery and disclosure materials on file, and any affidavits show that there is no genuine issue as to any material fact and that the movant is entitled to judgment as a matter of law.” Fed.R.Civ.P. 56(c). “If the party moving for summary judgment meets its initial burden of identifying for the court those portions of the material on file that it believes demonstrates the absence of any genuine issues of material fact,” the burden of production shifts and the nonmoving party must set forth “specific facts showing that there is a genuine issue for trial.” *T.W. Elec. Serv., Inc. v. Pacific Elec. Contractors Ass’n*, 809 F.2d 626, 630 (9th Cir.1987) (quoting Fed.R.Civ.P. 56(e)).

To establish the existence of a factual dispute, the opposing party need not establish a material issue of fact conclusively in its favor, but “must do more than simply show that there is some metaphysical doubt as to the material facts.” *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574 at 587, 106 S.Ct. 1348, 89 L.Ed.2d 538 (1986). It is sufficient that “the claimed factual dispute be shown to require a jury or judge to resolve the parties’ differing versions of the truth at trial.” *First National Bank of Arizona v. Cities Serv. Co.*, 391 U.S. 253, 289, 88 S.Ct. 1575, 20 L.Ed.2d 569 (1968); *T.W. Elec. Serv.*, 809 F.2d at 631. The nonmoving party must “go beyond the pleadings and by her own affidavits, or by depositions, answer to interrogatories, and admissions on file, designate specific facts showing that there is a genuine issue for trial.” *Celotex*, 477 U.S. at 324. Fed.R.Civ.P. 56(e) requires a party opposing summary judgment to “set out specific facts showing that there is a genuine issue for trial.” “In the absence of specific facts, as opposed to allegations, showing the existence of a genuine issue

for trial, a properly supported summary judgment motion will be granted.” *Nilsson, Robbins, et al. v. Louisiana Hydrolec*, 854 F.2d 1538, 1545 (9th Cir.1988).

DISCUSSION

The dormant Commerce Clause “directly limits the power of the States to discriminate against interstate commerce.” *Wyoming v. Oklahoma*, 502 U.S. 437, 454, 112 S.Ct. 789, 117 L.Ed.2d 1 (1992); *NCAA v. Miller*, 10 F.3d at 633, 638 (9th Cir.1993). “Discrimination simply means differential treatment of in-state and out-of-state economic interests that benefits the former and burdens the latter.” *United Haulers Ass’n v. Oneida-Herkimer Solid Waste Mgmt. Auth.*, 550 U.S. 330, 333, 127 S.Ct. 1786, 167 L.Ed.2d 655 (2007). “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).

A. Whether LCFS is Subject to Commerce Clause Challenge

Defendants contend that the LCFS is not subject to Commerce Clause challenge. This Court addresses Defendants’ arguments by separate order. In short, this Court concluded Section 211(c)(4) (B) of the Clean Air Act provides no express or unambiguous authority for California to violate the Commerce Clause. Accordingly, the LCFS is subject to Commerce Clause scrutiny.

B. Applicable Standard of Review

The Commerce Clause provides that “Congress shall have Power . . . [t]o regulate Commerce with foreign Nations, and among the several states.” U.S. Const. Art. I, § 8, cl. 3. This grant of power has “a ‘negative’ aspect” that “denies the States the power unjustifiably to discriminate against or burden the interstate flow of articles of commerce.” *Oregon Waste Sys., Inc. v. Dep’t of Env’tl. Quality*, 511 U.S. 93, 98, 114 S.Ct. 1345, 128 L.Ed.2d 13 (1994). “No State may attempt to isolate itself from a problem common to several States by raising barriers to the free flow of interstate trade.” *Chemical Waste Mgmt., Inc. v. Hunt*, 504 U.S. 334, 339-40, 112 S.Ct. 2009, 119 L.Ed.2d 121 (1992). Rather, the Commerce Clause adopts “the theory that the peoples of the several states must sink or swim together, and that in the long run prosperity and salvation are in union and not division.” *Baldwin v. G.A.F. Seelig, Inc.*, 294 U.S. 511, 523, 55 S.Ct. 497, 79 L.Ed. 1032 (1935).

In reviewing a dormant Commerce Clause challenge, the Court must first consider the applicable standard of review. If a law discriminates against out-of-state entities, or attempts to regulate beyond a state’s jurisdiction, then the Court applies a strict scrutiny standard. *Healey v. Beer Inst.*, 491 U.S. 324, 336-37, 109 S.Ct. 2491, 105 L.Ed.2d 275 (1989). If a law regulates in-state and out-of-state entities evenly and attempt to regulate only in-state activity, then the Court applies a balancing test. *Pike v. Bruce Church, Inc.*, 397 U.S. 137, 142, 90 S.Ct. 844, 25 L.Ed.2d 174 (1970). The strict scrutiny standard is difficult to satisfy, whereas a balancing test is more favorable to the state law.

The National Petrochemical Plaintiffs submit that this Court should apply strict scrutiny to analyze the LCFS because it discriminates “on its face, and in its practical effect, in favor of California transportation fuels and against transportation fuels from other States and Countries.” In addition, the National Petrochemical Plaintiffs argue that the LCFS is subject to strict scrutiny because it impermissibly regulates commerce beyond California’s borders. The National Petrochemical Plaintiffs contend that the LCFS violates the dormant Commerce Clause as a matter of law because it discriminates against and regulates out-of-state and foreign transportation fuels, is rooted in economic protectionist, and there are alternative, nondiscriminatory means to achieve the goal of reducing GHG emissions in California.

CARB argues that the National Petrochemical Plaintiffs’ motion is based on a misunderstanding and a mischaracterization of the LCFS. CARB maintains that the LCFS is facially neutral and does not regulate activity occurring wholly outside the state of California. Alternatively, CARB asserts that even if the LCFS is discriminatory, the LCFS survives strict scrutiny analysis because the LCFS has several legitimate local purposes and there are no reasonable nondiscriminatory alternatives to achieve its goals.

C. Strict Scrutiny Analysis

Plaintiffs argue that the LCFS discriminates against out-of-state and foreign ethanol and crude oil in favor of California corn-derived ethanol and California existing crude oils. Plaintiffs contend that because the LCFS discriminates on the face of the regulation, it is *per se* invalid. The Court considers Plaintiffs arguments related to ethanol and crude oils separately.

1. Whether the LCFS Discriminates Against Out-of-State Corn-Derived Ethanol

Relying on LCFS Section 95486(b) and Table 6, Plaintiffs argue that the LCFS' discriminatory treatment of physically and chemically identical fuels is reflected on the face of the LCFS. Plaintiffs point out that although corn ethanol produced in California and the Midwest have "identical physical and chemical properties" ISOR V-30, Table 6 provides lower, more favorable carbon intensity scores for corn ethanol produced in California than corn ethanol produced in the Midwest. As reflected in the table, *supra*, California corn-derived ethanol pathways are assigned 10% lower carbon intensity score as compared to the Midwest counterpart pathways. Plaintiffs contend that this difference reflects "differential treatment of in-state and out-of-state economic interests that benefits the former and burdens the latter." *Oregon*, 511 U.S. at 99. By assigning a higher carbon intensity score to the Midwest, the LCFS creates an "economic barrier against competition with the products of another state." *Baldwin*, 294 U.S. at 527.

In a separate order, this Court concluded that the LCFS discriminates against out-of-state corn-derived ethanol on its face and impermissibly regulates extraterritorially based on the ethanol pathways. Because this Court has addressed these issues in the Order on the Rocky Mountain Plaintiffs' Summary Judgment motion, and resolved those issues as a matter of law, this Court shall not address the additional arguments related to corn-derived ethanol presented in this motion. This Court does address the National Petrochemical Plaintiffs' arguments in that separate order, however, and GRANTS the National

Petrochemical Plaintiffs' summary adjudication motion to the extent they argue that the LCFS discriminates against out-of-state corn-derived ethanol and impermissibly regulates conduct outside of California.

2. Whether the LCFS Discriminates Against Out-of-State and Foreign Crude Oils

States may not “discriminate against an article of commerce by reason of its origin or destination out of State.” *C & A Carbone, Inc. v. Town of Clarkstown*, N.Y., 511 U.S. 383, 390, 114 S.Ct. 1677, 128 L.Ed.2d 399 (1994). “The central rationale for the rule against discrimination is to prohibit state or municipal laws whose object is local economic protectionism.” *Id.* at 337-38. A law or regulatory scheme “can discriminate against out-of-state interests in three different ways: (1) facially; (2) purposefully, or (3) in practical effect.” *Nat’l Ass’n of Optometrists & Opticians Lenscrafters, Inc. v. Brown*, 567 F.3d 521, 525 (9th Cir.2009). A law is facially discriminatory when it “is not necessary to look beyond the text of this statute to determine that it discriminates against interstate commerce.” *Camps Newfoundland/Owatonna, Inc. v. Town of Harrison*, 520 U.S. 564, 575-76, 117 S.Ct. 1590, 137 L.Ed.2d 852 (1997). In this context “‘discrimination’ simply means differential treatment of in-state and out-of-state economic interests that benefits the former and burdens the latter.” *Oregon Waste*, 511 U.S. at 99.

Defendants argue that the LCFS does not discriminate against foreign and out-of-state crude oil producers and suppliers because “a crude oil’s carbon intensity under the LCFS involves two factors, neither of which is origin.” Those two factors, according to Defendants, is (1) whether the crude oil is an HCICO and (2) whether the crude oil is from an emerging

crude source or an existing crude source. If a crude is an HCICO, and was not an existing crude source in 2006, then it must use its actual CI. All other fuels use the baseline average, labeled as CARBOB on Table 6. Defendants summarize the LCFS' treatment of crude oils as a neutral scheme in which all crude oils use the same CI unless they are an HCICO that was not part of the 2006 baseline.

The National Petrochemical Plaintiffs maintain that the LCFS discriminates against foreign and out-of-state crude oils in two ways. First, the LCFS discriminates against foreign HCICOs and favors California HCICO. Second, the LCFS discriminates against all foreign existing crude sources while favoring California's existing crude source. The National Petrochemical Plaintiffs argue that based on these distinctions, the LCFS violates the Commerce. The Court sets forth the National Petrochemical Plaintiffs' arguments of discrimination below. After explaining the arguments, the Court moves on to analyze them.

A. HCICOs

The National Petrochemical Plaintiffs argue that the LCFS discriminates against HCICOs made outside of California and favors HCICO from California. Between existing and emerging fuels, California's TEOR receives favorable treatment, whereas foreign HCICOs do not. Plaintiffs present the following table to illustrate the point⁵:

⁵ The data in this table differs slightly from the data relied on by the National Petrochemical Plaintiffs. Plaintiffs state that the CI assigned to California HCICO is 6.93. Defendants point out that 6.93 represents the CI for production only. When including transportation, the CA-GREET assigns a baseline of 8.07, not

Crude Oil (Percent of California Crude Market in 2006)	Carbon Intensity Calculated for Fuel Production and Transport	Carbon Intensity Assigned by LCFS for Fuel Production and Transport	Difference Assigned and Calculated Carbon Intensity Values
California TEOR (14.08%)	18.89	8.07	10.82
Venezuela Crude Oil (.063%)	21.95	21.95	—

The National Petrochemical Plaintiffs explain that there is no dispute that application of the “two factors” identified by Defendants results in the following: (1) California’s HCICO is assigned a CI value with less than half of the GHG emissions associated with its production and transport; (2) California’s HCICO is the only HCICO to qualify for this favorable treatment; and (3) All HCICOs from outside of California are required to account for all of the GHG emissions associated with their production and transportation. Defendants admit that the only “HCICO that qualifies for the default carbon intensity values,” i.e. favorable treatment, “is California crude oil produced using TEOR.” The National Petrochemical Plaintiffs argue that Defendants “gerrymandered the criteria to reach this outcome,” which establishes that the purpose and design of the

6.93. *See* Declaration of Scheible at ¶ 92. This Court adopts the appropriate baseline as used in the CA-GREET to use in the National Petrochemical Plaintiffs’ illustrative tables.

LCFS is to discriminate against out-of-state and foreign HCICOs.

B. Existing Sources

The National Petrochemical Plaintiffs further contend that California TEOR receives favorable treatment among other existing crude sources, while foreign existing sources receive less favorable treatment. As set forth above, the LCFS assigns a single average carbon intensity value to existing crude sources. FSOR at 23; LCFS § 95486(b)(2)(A)(1). Under the LCFS, existing crude sources “regulated parties *must* use these single carbon intensity values for all California CARBOB and diesel fuel regardless of the actual carbon intensity of producing or transporting the specific crude oil use, or the specific refinery operations.” FSOR at 23.

California TEOR is the only HCICO that “qualifies for the default average carbon intensity values.” FSOR at 22. California TEOR benefits in using the assigned baseline average carbon intensity rather than its actual carbon intensity value for production and transportation by a high margin. That is, the actual carbon intensity value of California TEOR is much higher than the baseline average. Nevertheless, the LCFS disregards California TEOR’s actual carbon intensity value and assigns it the baseline average to use in calculating credits and deficits under the system.

By contrast, the LCFS assigns existing crude sources from outside of California them an average carbon intensity that is higher than their actual carbon intensity values, as calculated by CARB. These foreign crude oil producers are required to use the assigned baseline average for existing fuels that is

equal to CARBOB. The baseline average is higher than the actual carbon intensity for production and transportation for these fuels.

In requiring all existing fuels to use the baseline average, the National Petrochemical Plaintiffs contend that the LCFS is designed to give California TEOR an advantage while discriminating against all other foreign existing crude sources. The following table illustrates the point⁶:

Existing Crude Oils within California's 2006 Baseline Mix (Percent of California crude market in 2006)	Carbon Intensity Assigned by LCFS for Production and Transportation	Carbon Intensity Assigned by LCFS for Production and Trans- portation	Difference Between Assigned and Calculated Carbon Intensity
California TEOR (14.80%)	18.89	8.07	-10.82
Alaskan Light Crude (16.10%)	4.36	8.07	+3.71
Imported Light Crude (44.4%)	5.64	8.07	+3.42

By requiring all existing fuels to use the baseline average, California TEOR is assigned a carbon intensity value that is *less than half* of the actual GHG emissions association with this fuel, whereas out-of-state and foreign existing crude sources are assigned a carbon intensity score that is nearly double that actual carbon intensity for those crudes.

⁶ Similar to the table above, this Court has used the baseline average of 8.07 to the CI assigned by the LCFS and to calculate the differences between the assigned and calculated CI Values.

C. Discussion

The design and practical effect of the LCFS is to favor California HCICO and discriminate against foreign HCICOs and out-of-state and foreign existing crude sources. Although the two variables (HCICOs vs. non-HCICOs and emerging sources vs. existing sources) appear to be neutral facially, these variables were designed to protect California's TEOR by giving that fuel an artificially favorable and lower carbon intensity value. State law need not "be drafted explicitly along state lines in order to demonstrate its discriminatory design." *Amerada Hess Corp. v. N.J. Dep't of Treasury*, 490 U.S. 66, 76, 109 S.Ct. 1617, 104 L.Ed.2d 58 (1989). The LCFS gives California's HCICO favorable treatment by assigning it the baseline average carbon intensity value, a value that is substantially lower than its actual carbon intensity score; no other HCICOs receive this favorable treatment. In addition, while California's TEOR benefits from application of the baseline average, all other existing crude sources are assigned higher carbon intensity values than the actual carbon intensity values for those crudes. Based on the design and practice effect of the LCFS, this Court finds that it violates the Commerce Clause because the Commerce Clause forbids discrimination, whether forthright or ingenious." [sic] *West Lynn Creamery*, 512 U.S. at 201 (quoting *Best & Co. v. Maxwell*, 311 U.S. 454, 455-56, 61 S.Ct. 334, 85 L.Ed. 275 (1940)).

The discriminatory design of the LCFS' favorable treatment of California's TEOR as compared to other HCICOs and other existing crude sources violates the Commerce Clause even though the distinctions drawn appear to be neutral. In *Bacchus*, the Supreme Court addressed a similar situation. A Hawaiian statute

exempted two alcohol products from a 20% excise tax—“okolehao” and “pineapple wine”—but did not exempt other “[l]ocally produced sake and fruit liqueurs.” 468 U.S. at 263. The record reflected that “neither okloehao nor pineapple wine is produced elsewhere [i.e., outside Hawaii].” *Id.* at 269. The Court held that the “exemption is clearly discriminatory, in that it applies only to locally produced beverages, even though it does not apply to all such products.” *Id.* at 271; *see also, Amerada Hess*, 490 U.S. at 75-76 (describing “discriminatory design” of an ostensibly facially neutral statute in *Bacchus*). Similarly, under the LCFS, all foreign HCICOs (e.g., from Canada and Venezuela) are treated less favorably than California HCICO. Just as Hawaii impermissibly granted preferential treatment to two local products in *Bacchus*, Defendants discriminate in favor of California HCICO and against HCICOs from outside California.

Defendants argue that this “narrow comparison” between HCICOs “would be proper if only HCICO producers competed against each other.” As the National Petrochemical Plaintiffs point out, however, “as long as there is some competition between locally produced exempt products and nonexempt products from outside the State, there is a discriminatory effect.” *Bacchus*, 468 U.S. at 271. Defendants acknowledge that California HCICO competes against foreign HCICOs because “crude oil is fungible and competes in a global, highly liquid market.” Discrimination that favors a specific in-state interest, such as California HCICO, and disfavors specific out-of-state interests, such as foreign HCICOs, “makes protectionist effect of the ordinance more acute.” *Carbone*, 511 U.S. at 392.

Defendants further argue that the LCF S’ treatment of crude oils cannot be discriminatory because they

predict an “inevitable decline of California crude oil” under the LCFS. This projected “inevitable decline” does not effect this Court’s analysis. “[I]t does not matter whether the challenged regulation actually increases the market share of local producers or whether it merely mitigates a projected decline.” *West Lynn Creamery*, 512 U.S. at 196 n. 12; see also, *Bacchus*, 468 U.S. at 272 (“[W]e perceive no principle in Commerce Clause jurisprudence supporting a distinction between thriving and struggling enterprises . . .”). The LCFS is designed to eliminate competition by new entrants by “making it unlikely that California will see a significant increase in new HCICO use.” While admitting that new HCICO use is unlikely because of the high actual carbon intensity values associated with those fuels, the LCFS protects the use California’s TEOR by assigning it an artificially low carbon intensity value. This constitutes discrimination against foreign and out-of-state interest.

Similarly, California’s favorable treatment of California TEOR when compared to other existing crude sources discriminates against out-of-state and foreign crude oil sources. Only California HCICO is advantaged by receiving a carbon intensity value that is lower than its actual carbon intensity value. Crude oils from Alaska and foreign countries are disadvantaged because they are assigned a carbon intensity value that is higher than the actual carbon intensity value for those crudes. Defendants recognize that from “plaintiffs’ perspective, producers who get a CI value higher than their actual CI are disadvantaged, and producers who get a CI value lower than their actual CI are advantaged. [sic] They explain that the LCFS is designed this way to “reduce the incentive for regulated parties to comply with the LCFS by shifting to less carbon-intensive crude oils or

refining operations.” However, in giving California TEOR a favorable CI score while assigning a higher score to out-of-state and foreign existing crude sources, the LCFS gives an economic advantage to an in-state source while penalizing economically out-of-state and foreign existing crude sources.

Moreover, Defendants fail to explain how giving California TEOR a substantially lower CI score promotes the goal of the LCFS. Defendants contend that CARB adopted this methodology to ensure that GHG emissions from petroleum-based fuels do not increase dramatically under the LCFS and to ensure that emissions reductions would come from lower carbon alternative fuels. Scheible Decl., ¶¶ 88-98. That the LCFS is designed to discourage the entry of foreign HCICOs from entering the California market, while giving an advantage to California’s HCICO, demonstrates that the LCFS gives an economic advantage to an in-state interest. This discriminates against interstate commerce by design and in practical effect.

3. Whether the LCFS serves a legitimate local purpose

Once a state law is shown to discriminate against interstate commerce “either on its face or in practical effect,” or to exercise extraterritorial control, the burden falls on the State to demonstrate *both* that the statute “serves a legitimate local purpose,” *and* that this purpose could not be served as well by available nondiscriminatory means. *Hughes v. Oklahoma*, 441 U.S. at 336; *see also, e.g., Sporhase v. Nebraska ex rel. Douglas*, 458 U.S. 941, 957, 102 S.Ct. 3456, 73 L.Ed.2d 1254 (1982); *Hunt v. Washington State Apple Advertising Comm’n*, 432 U.S. 333, 353, 97 S.Ct. 2434,

53 L.Ed.2d 383 (1977); *Dean Milk Co. v. Madison*, 340 U.S. 349, 354, 71 S.Ct. 295, 95 L.Ed. 329 (1951).

Defendants argue that the LCFS serves the legitimate and local purpose to reduce the risks of global warming. Defendants' correctly point out that in *Massachusetts v. EPA*, 549 U.S. 497, 127 S.Ct. 1438, 167 L.Ed.2d 248 (2007), the Supreme Court recognized that a state has a "well-founded desire to preserve its sovereign territory" from the threats of rising seas and other impacts of global warming. *Id.* at 519, 522. "That these climate-change risks are 'widely-shared' does not minimize [California's] interest" in reducing them. *Id.* at 522.

Significantly, in *Massachusetts v. EPA*, the Supreme Court held that states have standing to ask the federal government to regulate GHG emissions. 549 U.S. 497, 127 S.Ct. 1438, 167 L.Ed.2d 248. Nevertheless, the Court explained in dicta that a state has a local and legitimate interest in reducing global warming. Based on this authority, this Court finds that the LCFS serves a local and legitimate interest.

The National Petrochemical Plaintiffs contend that Defendants must also establish that the goals of the LCFS are unrelated to economic protectionism. See *New Energy Co. of Ind. v. Limbach*, 486 U.S. 269, 274, 108 S.Ct. 1803, 100 L.Ed.2d 302 (1988) (To survive strict scrutiny of a discriminatory law, defendants must show that the discrimination is "demonstrably justified by a valid factor unrelated to economic protectionism."). The National Petrochemical Plaintiffs argue that the Defendants fail to establish that the LCFS is unrelated to economic protectionism because the LCFS: (1) encourages "fuel shuffling" of ethanol when it serves to benefit local interests; (2) discourages "fuel shuffling" that would benefit Alaskan

and imported crude oils; and (3) encourages “fuel shuffling” of foreign HCICOs to prevent them from competing against California HCICO.

This Court agrees that the LCFS is related to economic protectionism. As set forth above, the LCFS was designed in part to “decrease dependent on foreign oil” and to “keep more money in the State” by “displacing imported transportation fuels with bio-fuels produced in the State.” Although the LCFS was designed, in part, to protect and promote California’s ethanol, crude oil, and energy markets, Defendants have established that it is justified by a valid factor unrelated to economic protectionism; to wit, the preservation of the environment by reducing GHG emissions. As set forth above, that is a legitimate local purpose.

4. Whether that purpose could be served through other nondiscriminatory means

The final consideration in the strict scrutiny analysis is whether California has established that the goal of reducing global warming cannot be adequately served by nondiscriminatory alternatives. *Carbone*, 511 U.S. at 392 (defendants must establish that they “had no other means to advance a legitimate local interest [sic]). California has failed to establish this fact. While this Court recognizes that the lifecycle analysis is a widely-accepted approach nationally and inter-nationally to reduce GHG emissions, Defendants have failed to establish that they could not achieve this goal through other nondiscriminatory means.

The National Petrochemical Plaintiffs establish that Defendants have failed to meet their burden of proving that no reasonable alternatives exist to adequately address the purpose of reducing GHG emission.

Defendants' expert concedes that California could "adopt a tax on fossil fuels" to "reduce greenhouse gas emissions associated with California's transportation sector." Babcock Decl. ¶ 5. According to Dr. Babcock, "[a] tax would increase the relative price of fossil fuels that would result in a cost advantage to alternative transportation methods that are reliant on renewable energy sources. [sic] *Id.*

Defendants argue that a fuel tax is an in-adequate alternative because the suggestion of a fuel tax "willfully ignores the political reality of the difficulty of passing a tax measure in the current economic climate." That the tax would be difficult to pass does not establish that it is an unreasonable alternative to the LCFS. As the National Petrochemical Plaintiffs' point out, the reason the Commerce Clause prohibits discrimination against interstate commerce is because discrimination always will be the more "attractive" option because it "benefits local producers by burdening out-of-state competitors." *West Lynn Creamery*, 512 U.S. at 193; *see also Wunnicke*, 467 U.S. at 92.

Defendants further argue that a fuel tax is inadequate because it would not address the lifecycle emissions from fuels. To the extent that Defendants seek to address GHGs emitted during the production and transport of fuels, CARB may regulate production facilities, refineries and farms in California with an LCFS that does not shift the burden to out-of-state and foreign entities or impermissibly regulate out-of-state activities. To the extent that Defendants argue that alternative approaches do not allow them to control of leakage outside of California's borders, Defendants are reminded that they may not regulate GHG emissions from fuel production and transportation outside of California. Defendants may not

“extend . . . [California’s] police power beyond its jurisdictional bounds.” *Carbone*, 511 U.S. at 393.

The National Petrochemical Plaintiffs further argue that the LCFS itself is an inadequate to achieve Defendants’ goals of reducing GHG emissions and to combat global warming. The National Petrochemical Plaintiffs explain that the LCFS creates an incentive for shuffling transportation fuels, whereby regulated parties transport high carbon intensity fuels away from California and transport low carbon intensity fuels to California. The National Petrochemical Plaintiffs submit that this “fuel shuffling” would result in less efficient fuel distribution routes in which transportation fuels travel further distances, resulting in higher GHG emissions nationally. *See* Hogan Decl. ¶ 8. Although this Court agrees that the effects of the LCFS on global warming are speculative at best, the National Petrochemical Plaintiffs’ arguments do not address the relevant inquiry. The Court does not consider whether the LCFS will address adequately Defendants’ goals of combating global warming. The Court considers whether Defendants have established that no adequate alternatives exists.

Although alternative approaches may be less desirable for a number of reasons, Defendants have failed to establish there are no nondiscriminatory means by which California could serve its purpose of combating global warming through the reduction of GHG emissions. *See Dean*, 340 U.S. 349, 71 S.Ct. 295, 95 L.Ed. 329 (suggesting the use of national standards or expanding city inspections to achieve health-motivated regulation). Because other, nondiscriminatory means exist to combat global warming in California, the LCFS must be struck down.

5. Conclusion

If a “restriction on commerce is discriminatory, it is virtually per se invalid.” *Oregon Waste*, 511 U.S. at 99; *see also Miller*, 10 F.3d at 638. A discriminatory state law must be struck down unless the defendant can “demonstrate, under rigorous scrutiny, that it has no other means to advance a legitimate local interest.” *Carbone*, 511 U.S. at 392; *see also, United Haulers*, 550 U.S. at 357; *Conservation Force, Inc. v. Manning*, 301 F.3d 985, 995 (9th Cir.2002). Even if a State is purporting to advance a legitimate end, it may not do so through invalid “legislative means.” *Chemical Waste*, 504 U.S. at 340. Moreover, where, as here, the discrimination implicates foreign commerce, the State regulation is “subjected to more rigorous and searching scrutiny.” *South-Central Timber Dev. v. Wunnicke*, 467 U.S. 82, 100, 104 S.Ct. 2237, 81 L.Ed.2d 71 (1984), because “discriminatory treatment of foreign commerce may create problems, such as the potential for international retaliation, that concern the Nation as a whole.” *Kraft Gen. Foods, Inc. v. Iowa Dep’t of Revenue & Fin.*, 505 U.S. 71, 79, 112 S.Ct. 2365, 120 L.Ed.2d 59 (1992).

California’s LCFS gives an economic advantage to California TEOR over foreign HCICOs and assigns a mandatory economic disadvantage to out-of-state and foreign existing crude sources. While regulating GHG emissions to combat global warming may be a legitimate end, California may not do so through the use of invalid legislative means. *See Or. Waste Sys. Inc. v. Dep’t of Env’tl. Quality of Or.*, 511 U.S. 93, 100, 114 S.Ct. 1345, 128 L.Ed.2d 13 (1994) (The “purpose of, or justification for, a law has no bearing on whether it is facially discriminatory.”). Moreover, the discrimination implicates foreign commerce, which

makes it the subject of a more rigorous scrutiny. Because Defendants have failed to establish that no alternative, nondiscriminatory means exist to address their legitimate purpose, this Court finds that the LCFS violates the dormant Commerce Clause.

CONCLUSION AND ORDER

For the foregoing reasons, this Court:

1. GRANTS the National Petrochemical Plaintiffs' summary adjudication motion to the extent that National Petrochemical Plaintiffs argue that the LCFS violates the dormant Commerce Clause by impermissibly discriminating against out-of-state and foreign crude oil sources;
2. GRANTS the National Petrochemical Plaintiffs' summary adjudication motion to the extent that they argue that the LCFS violates the dormant Commerce Clause by discriminating against out-of-state corn ethanol producers and suppliers and impermissibly regulates extraterritorially (for the reasons explained in the Order on Rocky Mountain Plaintiffs' Summary Judgment Motion);
3. CERTIFIES judgment on this claim pursuant to Fed.R.Civ.P. 54(b), even though there is an outstanding claim for relief based on the claim of preemption. Because the LCFS is unenforceable because it violates the dormant Commerce Clause, there is no just reason for delay in these proceedings; and
4. DIRECTS clerk of court to enter judgment in favor of the National Petrochemical Plaintiffs and against Defendants on the dormant Commerce Clause claim.

IT IS SO ORDERED.

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APPENDIX D

UNITED STATES DISTRICT COURT
E.D. CALIFORNIA

Case Nos. CV-F-09-2234 LJO GSA
CV-F-10-163 LJO DLB

ROCKY MOUNTAIN FARMERS UNION, REDWOOD COUNTY
MINNESOTA CORN AND SOYBEAN GROWERS, PENNY
NEWMAN GRAIN, INC., GROWTH ENERGY, RENEWABLE
FUELS ASSOCIATION, REX NEDEREND, FRESNO COUNTY
FARM BUREAU, NISEI FARMERS LEAGUE, AND
CALIFORNIA DAIRY CAMPAIGN,
Plaintiffs,

v.

JAMES N. GOLDSTENE, EXECUTIVE OFFICER OF THE
CALIFORNIA AIR RESOURCES BOARD,
Defendant.

NATIONAL PETROCHEMICAL & REFINERS ASSOCIATION,
AMERICAN TRUCKING ASSOCIATION,
CENTER FOR NORTH AMERICAN ENERGY SECURITY,
AND THE CONSUMER ENERGY ALLIANCE,
Plaintiffs,

v.

JAMES GOLDSTENE, EXECUTIVE OFFICER OF THE
CALIFORNIA AIR RESOURCES BOARD, MARY D. NICHOLS,
DANIEL SPERLING, KEN YEAGER, DORENE D'ADAMO,
BARBARA RIORDAN, JOHN R. BALMES, LYDIA H.
KENNARD, SANDRA BERG, RON ROBERTS, RONALD O.
LOVERIDGE, MEMBER OF THE CALIFORNIA AIR RESOURCES
BOARD; ARNOLD SCHWARZENEGGER, GOVERNOR OF THE

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STATE OF CALIFORNIA, AND EDMUND BROWN, ATTORNEY
GENERAL OF THE STATE OF CALIFORNIA,
Defendants.

AND RELATED INTERVENOR ACTIONS AND AMICI.

Dec. 29, 2011

ORDER ON DEFENDANTS' SUMMARY
JUDGMENT MOTION (Doc. 138)

LAWRENCE J. O'NEILL, District Judge.

INTRODUCTION

To implement provisions of California Assembly Bill 32 ("AB 32"), California's Global Warming Solutions Act of 2006, Cal. Health & Saf.Code, § 38500 et seq., defendant California Air Resource Board ("CARB") promulgated its Low Carbon Fuel Standard, Cal.Code Regs. tit. 17, §§ 95480-95490 ("LCFS"). Plaintiffs¹ initiated separate actions to challenge California's LCFS. Plaintiffs challenge the LCFS. Plaintiffs assert that the LCFS is prohibited by the dormant Commerce Clause and is preempted by federal law.

¹ Plaintiffs in this consolidated action are Rocky Mountain Farmers Union, Redwood County Minnesota Corn and Soybean Growers, Penny Newman Grain, Inc., Growth Energy, Renewable Fuels Association, Red Nederend, Fresno County Farm Bureau, Nisei Farmers League, California Dairy Campaign, National Petrochemical & Refiners Association, American Trucking Association, Center for North American Energy Security, and the Consumer Energy Alliance.

Defendants² seek summary judgment, pursuant to Fed.R.Civ.P. 56, that California's LCFS is an authorized control of a motor vehicle fuel pursuant to 42 U.S.C. § 7545(c)(4)(B) ("Section 211(c)(4)(B)") that is insulated from preemption and Commerce Clause challenges. This Court addresses Defendants' summary judgment motion first because, if meritorious, Defendants' arguments would resolve this action. Defendants contend that pursuant to Section 211(c)(4)(B) of the Clean Air Act, the LCFS is an authorized control on carbon emissions associated with fuels. Defendants rely on Section 211(c)(4)(B) to argue further that the LCFS is not preempted by the federal Clean Air Act and is insulated from Commerce Clause scrutiny.

Having considered the parties' arguments, relevant legal authority, and the admissible exhibits submitted, this Court finds that the LCFS is an authorized regulation pursuant to Section 211(c)(4)(B). California's authority pursuant to Section 211(c)(4)(B), however, is not unfettered. California regulations that are exempt from preemption under Section 211(c)(4)(B) must still

² 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. Defendant-intervenors are Natural Resources Defendant Council, Sierra Club, Conservation Law Foundation Defendants and defendant-intervenors shall be referred to collectively as "Defendants" or "CARB."

be considered according to ordinary conflict preemption principles. In addition, contrary to Defendants' repeated assertions, Section 211(c)(4)(B) does not insulate CARB from dormant Commerce Clause scrutiny.

In addition to the arguments presented related to Section 211(c)(4)(B), Defendants' challenge Plaintiffs' preemption and Commerce Clause claims on the merits. Defendants argue that the Plaintiffs' facial preemption claim fails *in toto*, because Defendants cannot establish that there are no set of circumstances under which the LCFS would be valid.

Having considered the parties' arguments, the admissible evidence, and relevant case law, this Court finds that Section 211(c)(4)(B) does not exempt California from preemption when applied to EISA. California's Section 211(c)(4)(B) exempts California from federal regulations outlined in Section 211(c). This Court must apply the ordinary preemption principles to determine whether the LCFS is preempted by Section 211(o), a separate provision of the Clean Air Act. In addition, this Court finds that Section 211(c)(4)(B) does not expressly remove the LCFS from Commerce Clause scrutiny. As to the appropriate standard of review on a facial preemption challenge, this Court finds that Defendants have failed to establish that the "no set of circumstances" standard is the appropriate standard to address the current preemption challenge. For these reasons, this Court DENIES Defendants' summary judgment motion on these issues. This Court shall address Defendants' other affirmative arguments on the merits of Plaintiffs' challenges in separate orders resolving Plaintiffs' summary judgment motions.

BACKGROUND

Clean Air Act

The Clean Air Act is comprehensive federal legislation governing air pollution prevention and control, emissions standards, acid rain reduction, permits, and stratospheric ozone protection. *See generally*, 42 U.S.C. ch. 85. 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). Pursuant to the Clean Air Act, “[t]he direct regulation of emissions from stationary sources is primarily left to the states. On the other hand, the federal government sets nationwide emissions standards for mobile sources.” *Jensen Family Farms, Inc. v. Monterey Bay Uni. Air Pollution Control Dist.*, 644 F.3d 934, 938 (9th Cir.2011) (citations omitted). Although the Clean Air Act creates national standards and programs for mobile sources, 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*”).

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. § 7401(c). Under the Act, the “States and the Federal Government [are] partners in the struggle against air pollution.” *Gen. Motors Corp. v. United States*, 496 U.S. 530, 532, 110 S.Ct. 2528, 110 L.Ed.2d 480 (1990). Federal, state and local governments work together to implement and enforce some provisions of the Clean Air Act. For example, the Clean 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.* Pursuant to the Clean Act, the federal government 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).

Federal Fuels Program

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 Environ-

mental 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 additive. 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.

In their complaints, Plaintiffs allege that the LCFS conflicts with and is preempted by Section 211(o). The Energy Policy Act of 2005 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 established a renewable fuel volume mandate that requires 7.5 billion gallons of renewable fuels, including ethanol, to be blended into gasoline by 2010. The RFS was modified by the Energy Independence and Security Act of 2007 (“EISA”), creating a second federal renewable fuel standard program (“RFS2”). EISA modified the RFS in several ways. For example, EISA significantly increased the required volume of renewable fuels for sale in gasoline. The required volumes include an incremental increase from 2009 through 2022, with a goal of 36 billion gallons of biofuels used. Section 211(o)(2). EISA also mandates that the majority of the renewable fuels produced by 2022

consist of “advanced biofuels,” with an emphasis on cellulosic ethanol. 42 U.S.C. § 7545(o)(2)(B)(I-III).

EISA requires the EPA to set regulations to ensure the reduction of greenhouse gases (“GHGs”). In so doing, EISA mandates the EPA to consider lifecycle GHG emissions and to set lifecycle GHG performance thresholds for biofuels. EISA defines the term “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 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. 42 U.S.C. § 7545(o)(2)(A)(i).

In addition, 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). Section 211(o) exempts certain

United States corn ethanol biorefineries from this provision. 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 GHG lifecycle emissions by 20%. *Id.*

Plaintiffs argue that the LCFS is preempted by Section 211(o). Plaintiffs contend that the LCFS conflicts with the Section 211(o) to the extent that the LCFS requires renewable fuel facilities that are exempted from Section 211(o) requirements to comply with the LCFS. Defendants maintain that the LCFS does not conflict with Section 211(o) and is authorized by Section 211(c)(4)(B).

California and the Clean Air Act

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*, 331 F.3d at 671.

CARB contends that Section 211(c)(4)(B) expressly authorizes California to control fuels, and expressly authorizes the LCFS. Section 211(c)(4)(B) is an exception to a preemption provision. Section 211(c)(4)(A) 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 additive.

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. EPA*, 348 F.3d 772, 777 n. 1 (9th Cir.2003); *Engine Mfrs. Ass’n v. United States EPA*, 88 F.3d 1075, 1079 n. 9 (D.C.Cir.1996).

California's Fuels Program

California has a long-standing fuels program. In some cases, California regulated fuel components before the federal government. For example, California regulated Reid vapor pressure and lead content in gasoline prior to the federal government. *See W. Oil & Gas Ass'n v. Orange County Air Pollution Control Dist.*, 14 Cal.3d 411, 414, 121 Cal.Rptr. 249, 534 P.2d 1329 (1975). In addition, California was a leader in prohibiting lead in gasoline. *See Motor Vehicle Mfrs. Ass'n v. N.Y. Dep't of Envtl. Conservation*, 17 F.3d 521, 529 (2d Cir.1994). California's Phase 2 reformulated gasoline regulations set standards for eight gasoline specifications: sulfur, benzene, olefins, aromatic hydrocarbons, oxygen, Reid vapor pressure, and distillation temperatures for the 50% and 90% evaporation points. *See Cal.Code Regs.*, tit. 13 §§ 2250-72. In 1999, CARB approved amendments to its reformulated gasoline regulations banning methyl tertiary butyl ether ("MTBE") due to concerns over contamination of California's groundwater. *Oxygenated Fuels Ass'n, Inc. v. Davis*, 163 F.Supp.2d 1182, 1185-86 (E.D.Cal.2001). As a result, ethanol became the primary oxygenate in California gasoline. The federal government has not passed a federal LCFS.

AB32

In enacting the Global Warming Solutions Act of 2006, AB 32, the California Legislature found, *inter alia*: "Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California." Cal. Health & Saf.Code, § 38501. AB 32 set the goal of reducing GHG emissions in California to 1990 levels by the year 2020. To attain these goals, AB 32 charged CARB to develop and implement regulations in a number of areas.

In January 2007, California's Governor issued Executive Order S-01-07 ("Executive Order"), setting a statewide goal to "reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020." In the Executive Order, the Governor called on CARB to "determine if [an LCFS] can be adopted as a discrete early action measure pursuant to AB 32." *Id.* In June 2007, CARB adopted the LCFS as an early action measure. Public workshops on the issue, formal rule-making procedures followed, culminated in the final adoption of the regulation in April 2010. LCFS §§ 95480-95490. Plaintiffs challenge the LCFS regulations in this action.

The purpose of the challenged regulation "is to implement a low carbon fuel standard, which will reduce greenhouse gas emissions by reducing the full fuel-cycle, carbon intensity of the transportation fuel pool used in California [.] LCFS § 95380. The LCFS "applies to any transportation fuel . . . that is sold, supplied, or offered for sale in California, and to any person who, as a regulated party defined in [the regulation] is responsible for a transportation fuel in a calendar year." LCFS § 95480.1(a).

California's LCFS focuses on the "carbon intensity" of fuels to estimate emissions related to a fuel's lifecycle, including GHGs emitted when the fuel is extracted, refined, and transported to 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. *See*, LCFS §§ 95482(b), (c). Reductions in the average carbon intensity were mandated to begin in 2011, with the reduction requirement increasing through 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. Each year, a regulated party's overall carbon intensity for its pool of transportation fuels must meet the applicable annual carbon intensity standards. LCFS §§ 95484(b)(1), 95485. Fuel providers may meet carbon intensity standards either by blending low-carbon ethanol into gasoline or buying credits generated from another fuel provider that has credits. LCFS §§ 95485, 95484(b)(1).

Carbon Intensity

“Carbon intensity is not an inherent chemical property of a fuel, but rather it is a reflective of the process in making, distributing, and using that fuel.” CARB, *Final Statement of Reasons* (“FSOR”), 951. The “LCFS contains no requirements that dictate the exact composition of compliant transportation fuels.” FSOR at 442. The LCFS does “not set[] a fuel standard,” and it does not “establish any motor-vehicle specifications.” FSOR at 439, 442.

A gallon of ethanol made from corn grown and processed in the Midwest will, under a 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, corn ethanol from the Midwest

will have different carbon intensity than the sugar cane ethanol from Brazil.

CARB, *Initial Statement of Reasons* (“ISOR”) V-30.

Carbon intensity is defined as “the amount of life-cycle greenhouse gas emissions, per unit of energy of fuel delivered, expressed in grams of carbon dioxide per megajoule.” LCFS § 95481(a)(11). “Lifecycle greenhouse gas emissions” are defined 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 § 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 § 95481(a)(28). 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.

Procedural History

As set forth above, Plaintiffs challenge the LCFS on two grounds. First, Plaintiffs contend that the LCFS discriminates against interstate commerce, regulates

transactions occurring outside of the state, and imposes substantial burdens on interstate commerce that clearly exceed any putative benefits. Second, Plaintiffs allege that the LCFS is preempted by federal law because it conflicts with and stands as an obstacle to the accomplishment of Congress' goals in Section 211(o), as modified by EISA.

Defendants moved to dismiss the complaints arguing, *inter alia*, that Section 211(c)(4)(B) immunizes them from (1) scrutiny under the Commerce Clause and (2) preemption by Section 211(o). This Court rejected these arguments as a matter of law. *See Rocky Mountain Farmers Union v. Goldstene*, 719 F.Supp.2d 1170 (E.D.Cal.2010) ("Motion to Dismiss Order"). As to the Commerce Clause, this Court explained that "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." *Id.* at 1196 (citing *New England Power Co. v. New Hampshire*, 455 U.S. 331, 341, 102 S.Ct. 1096, 71 L.Ed.2d 188 (1982)). This Court further rejected Defendants argument that ordinary preemption principles do not apply in this action. *Id.* at 1187-88. Moreover, this Court found that Section 211(c)(4)(B) did not apply to authorize the LCFS. Finally, the Court found that Plaintiffs stated a claim for preemption and a violation of the commerce clause.

Although only limited discovery was completed, there are four Fed.R.Civ.P. 56 motions and two preliminary injunction motions before this Court. Although each motion contains some overlapping arguments, there are unique arguments, positions, and evidence submitted with each motion. In addition, the burdens of proof and persuasion, and standards of

review, differ with each motion. Accordingly, this Court shall address each motion in a separately-filed order. This order addresses and resolves Defendants' summary judgment motion (Doc. 138).

JUDICIAL NOTICE, OBJECTIONS,
AND CONSIDERATION OF EVIDENCE
AND ARGUMENTS

In addition to the pending motion, the parties have submitted requests for judicial notice, objections to evidence submitted, motions to strike, and other miscellany. Moreover, this Court has received multiple amici curiae briefs. This Court carefully reviewed and considered the record, including all evidence, arguments, points and authorities, declarations, testimony, statements of undisputed facts and responses thereto, objections and other papers filed by the parties. Omission of reference to evidence, an argument, document, objection or paper is not to be construed to the effect that this Court did not consider the evidence, argument, document, objection or paper. This Court thoroughly reviewed, considered and applied the evidence it deemed admissible, material and appropriate for summary judgment. This Court does not rule on objections in a summary judgment context, unless otherwise noted.

Moreover, this Court will not address the request for judicial notice specifically, but notes the following applicable standards. To be judicially noticeable, 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 appropriate for records and reports of administrative bodies." *United States v. 14.02 Acres*

of *Land More or Less in Fresno County*, 547 F.3d 943, 955 (9th Cir.2008). This Court may not take judicial notice, however, of documents filed with an administrative agency to prove the truth of the contents of the documents. The comments made by third parties that are included in the ISOR or FSOR are subject to hearsay objections, and do not rise to the “high degree of indisputability” required for judicial notice for their truth. *Jespersen v. Harrah’s Operating Co.*, 444 F.3d 1104, 1110 (9th Cir.2006) (citing Fed.R.Evid. 201 advisory committee’s note). If cited, these statements may be considered for their existence, but not their truth. *Id.* In addition, this Court takes judicial notice of public records not subject to reasonable dispute. *See Hennessy v. Penril Datacomm Networks, Inc.*, 69 F.3d 1344, 1354-55 (7th Cir.1995) (court properly refused to take judicial notice of corporation’s SEC form to determine disputed fact because “its contents were subject to dispute”). While this Court may take judicial notice of the legislative histories, the statements contained therein may be subject to dispute.

STANDARD OF REVIEW

Fed.R.Civ.P. 56 permits a “party against whom relief is sought” to seek “summary judgment on all or part of the claim.” In a summary judgment motion, a court must decide whether there is a “genuine issue as to any material fact.” Fed.R.Civ.P. 56(c); *see also*, *Adickes v. S.H. Kress & Co.*, 398 U.S. 144, 157, 90 S.Ct. 1598, 26 L.Ed.2d 142 (1970). A party seeking summary judgment/adjudication bears the initial burden of establishing the absence of a genuine issue of material fact. *See Celotex Corp. v. Catrett*, 477 U.S. 317, 323, 106 S.Ct. 2548, 91 L.Ed.2d 265 (1986). The moving party may satisfy this burden in two ways: (1) by presenting evidence that negates an essential element

of the nonmoving party's case; or (2) by demonstrating that the nonmoving party failed to make a showing of sufficient evidence to establish an essential element of the nonmoving party's claim, and on which the nonmoving party bears the burden of proof at trial. *Id.* at 322, 106 S.Ct. 2548. "The judgment sought should be rendered if the pleadings, the discovery and disclosure materials on file, and any affidavits show that there is no genuine issue as to any material fact and that the movant is entitled to judgment as a matter of law." Fed.R.Civ.P. 56(c). "If the party moving for summary judgment meets its initial burden of identifying for the court those portions of the material on file that it believes demonstrates the absence of any genuine issues of material fact," the burden of production shifts and the nonmoving party must set forth "specific facts showing that there is a genuine issue for trial." *T.W. Elec. Serv., Inc. v. Pacific Elec. Contractors Ass'n*, 809 F.2d 626, 630 (9th Cir.1987) (quoting Fed.R.Civ.P. 56(e)).

To establish the existence of a factual dispute, the opposing party need not establish a material issue of fact conclusively in its favor, but "must do more than simply show that there is some metaphysical doubt as to the material facts." *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 587, 106 S.Ct. 1348, 89 L.Ed.2d 538 (1986). It is sufficient that "the claimed factual dispute be shown to require a jury or judge to resolve the parties' differing versions of the truth at trial." *First National Bank of Arizona v. Cities Serv. Co.*, 391 U.S. 253, 289, 88 S.Ct. 1575, 20 L.Ed.2d 569 (1968); *T.W. Elec. Serv.*, 809 F.2d at 631. The nonmoving party must "go beyond the pleadings and by her own affidavits, or by depositions, answer to interrogatories, and admissions on file, designate specific facts showing that there is a genuine issue

for trial.” *Celotex*, 477 U.S. at 324, 106 S.Ct. 2548. Fed.R.Civ.P. 56(e) requires a party opposing summary judgment to “set out specific facts showing that there is a genuine issue for trial.” “In the absence of specific facts, as opposed to allegations, showing the existence of a genuine issue for trial, a properly supported summary judgment motion will be granted.” *Nilsson, Robbins, et al. v. Louisiana Hydrolec*, 854 F.2d 1538, 1545 (9th Cir.1988).

DISCUSSION

Defendants maintain and reassert their position that California has broad authority, pursuant to Section 211(c)(4)(B), to regulate fuels. In addition, Defendants maintain that, pursuant to Section 211(c)(4)(B), California’s LCFS is exempt from all preemption challenges and is insulated from Commerce Clause challenges. Defendants argue, *inter alia*, that (1) the LCFS is an authorized control of motor vehicle fuel pursuant to Section 211(c)(4)(B); (2) California’s authority pursuant to Section 211(c) is not restricted by Section 211(o); (3) the LCFS does not conflict with Section 211(o); (4) the Supremacy Clause is not invoked between two provisions of federal law; and (5) Section 211(c)(4)(B) insulates California fuel regulations from the Commerce Clause. In addition, Defendants challenge Plaintiffs’ preemption and Commerce Clause claims, arguing that they fail as a matter of law. This Court first considers whether the LCFS is an authorized regulation pursuant to Section 211(c)(4)(B). If the LCFS is an authorized regulation of a motor fuel or fuel additive, the Court next considers the scope of the Section 211(c)(4)(B) preemption exemption, including whether preemption principles apply to the LCFS. Next, the Court shall consider Defendants’ substantive challenges to

Plaintiffs' preemption claim. Finally, the Court will turn to Defendants' challenges to Plaintiffs' Commerce Clause Claim.

I. Whether Section 211(c)(4)(B) Applies to the LCFS

To be an authorized regulation pursuant to Section 211(c)(4)(B), the "LCFS must both regulate a component of a fuel or a fuel additive and be for the purpose of motor vehicle emissions control." *Rocky Mountain Farmers Union*, 719 F.Supp.2d at 1190, citing Section 211(c)(4)(B). CARB argues that the LCFS fits squarely within this authorization. Relying on this Court's Motion to Dismiss Order, Plaintiffs contend that Section 211(c)(4)(B) does not authorize the LCFS because the LCFS does not control a component of a fuel or a fuel additive and does not address motor vehicle emissions.

In its Motion to Dismiss Order, the Court ruled that "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." *Rocky Mountain Farmers Union*, 719 F.Supp.2d at 1191. Plaintiffs contend that this Court's prior ruling controls this motion. Plaintiffs overstate this Court's ruling, particularly in light of the more stringent standard of review presented in this action. In the Motion to Dismiss Order, this Court considered that "Plaintiffs have alleged that lifecycle analysis of the LCFS does not regulate a component of a fuel of a fuel additive . . . 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." *Rocky Mountain Farmers Union*, 719 F.Supp.2d at 1192. Thus, the Court's conclusion was based in part on the plaintiffs'

allegations. *Id.* at 1191. Because this Court’s ruling was based in part on the allegations of the complaint, and to the extent that this Court’s prior ruling relied solely on Plaintiffs’ allegations, that ruling must be reconsidered in this motion pursuant to Fed.R.Civ.P. 56 standards of review. In addition, as set forth more fully below, this Court reconsiders questions of law reargued in this motion.

A. Whether the LCFS is a control or regulation
“for the purpose of motor vehicle emissions”

California’s regulation of fuel additives and components must be “for the purpose of motor vehicle emission control.” *Rocky Mountain Farmers Union*, 719 F.Supp.2d at 1190; *see also, Davis*, 348 F.3d at 777; Section 211(c)(4)(B). In its Motion to Dismiss Order, this Court ruled: “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.” *Rocky Mountain Farmers Union*, 719 F.Supp.2d at 1192. This ruling was based, among other things, on Plaintiffs’ well-pleaded allegations in the complaint. As explained more fully above, in this Fed.R.Civ.P. 56 motion, this Court reconsiders this question pursuant to the applicable standards of review. When reviewing the purpose of the LCFS, 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. Defendants point out that the purpose of the LCFS is codified at 17 Cal.Code. Regs., § 95480, which reads, in relevant part: “the purpose of the regulation is to implement a low carbon fuel standard, which

will reduce greenhouse gas emissions by reducing the full fuel-cycle, carbon intensity of the transportation fuel pool used in California [.]” In addition, Defendants contend that the LCFS was developed by CARB pursuant to the Executive Order, which aimed to “reduce the carbon intensity of California’s transportation fuels by at least 10 percent by 2020.” Moreover, Defendants quote CARB Board Resolution 09-31, wherein CARB resolved, in pertinent part:

Pursuant to Board Resolution 08-47, there are a number of reasons why GHG emission reductions from transportation fuels are best achieved using the proposed regulatory approach, as identified below. While California’s cap-and-trade program is expected to include upstream coverage of transportation fuels beginning in 2015, a LCFS requirement will complement this coverage, and will: (a) ensure that the GHG emissions from the full fuel lifecycle are accounted for and reduced to the extent feasible; (b) stimulate the development of substantially lower-carbon transportation fuels more directly than including transportation fuels in the cap-and-trade program; (c) achieve long-term reductions in GHG emissions from transportation fuels; (d) diversify the California fuel pool; and (e) reduce the State’s dependence on petroleum;

* * *

The proposed regulation is expected to significantly reduce emissions of GHGs, such as CO₂, methane, nitrous oxide, and other GHG contributors from the use of transportation fuels subject to the LCFS; by 2020 the LCFS is expected to reduce GHG emissions from the combustion of transportation fuels in California by about 16

million metric tons of carbon dioxide (16 MMT CO₂e) annually); the estimated GHG emissions reductions for the full fuel lifecycle, including fuel production through combustion are about 23 MMT CO₂e in 2020—a 10 percent reduction of the GHG emissions from the use of transportation fuel, compared to the expected 3 percent reduction in GHG emissions if only the federal RFS2 requirements were met.

ARB Board Resolution, 09-31, pp. 8-9.

Plaintiffs counter that LCFS does not control motor vehicle emissions, because the LCFS does not control tailpipe combustion emissions. Rather, the LCFS regulates the direct and indirect effects of the process of making fuels, such as the land use, deforestation, conversion, and storage. Moreover, Plaintiffs point out that “[n]ew and existing fuels that comply with the LCFS regulation will be essentially indistinguishable from comparable fuels that comply with other State and federal regulations.” FSOR 950; ISOR V-28-V-30. Thus, Plaintiffs conclude, the LCFS lifecycle approach—favoring certain pathways that grow and process feedstocks with less energy use—controls how a fuel is made and was passed for the purpose of controlling emissions generally, not for the purpose of reducing emissions from a motor vehicle specifically.

CARB contends that the term “motor vehicle emissions control” is not limited to emissions from tailpipe combustion. CARB argues that it is authorized to pass a “motor vehicle emissions control” that covers total California motor vehicle transportation emissions, including upstream emissions. Defendants maintain that the LCFS, which considers emissions from fuel manufacture and transport in addition to

tailpipe combustion, was passed for the purpose of motor vehicle emission control.

Having considered the parties' arguments and evidence submitted in support thereof, this Court finds that Defendants have established that the LCFS was passed for the purpose of motor vehicle emission control. The LCFS was established pursuant to the Executive Order, which directed CARB to design a system what would reduce GHG emissions. The LCFS imposes standards on motor vehicle fuels, including CARBOB and diesel, aimed to reduce GHGs, air pollution and emissions. Although Plaintiffs correctly point out that the LCFS controls more than tailpipe combustion emissions, Plaintiffs fail to point out specific evidence to rebut the evidence submitted by Defendants that establishes that the *purpose* of the LCFS is to control motor vehicle emission. Accordingly, Defendants are entitled to summary adjudication that the LCFS was passed for the purpose of motor vehicle emissions control.

B. Whether the LCFS is a control or prohibition respecting any "characteristic or component of a fuel or fuel additive"

In its Motion to Dismiss Order, this Court found that Section 211(c)(4)(B) was restricted by the language of Section 211(c)(4)(A), which reads:

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). This Court found that “Section 211(c)(4)(B) does not grant California unfettered authority to regulate fuels . . . Section 211(c)(4)(B) grants California an exemption from federal preemption in the area of fuel components and fuel additives regulation[.]” *Rocky Mountain Farmers Union v. Goldstene*, 719 F.Supp.2d 1170, 1189 (E.D.Cal.2010). In this motion, Defendants ask this Court to reconsider the Court’s narrow construction of the Section 211(c)(4)(B) preemption exemption. The Court shall revisit its conclusion to determine the breadth and scope of Section 211(c)(4)(B).

The Court’s conclusion, restricting the scope of the exemption to “fuel components and fuel additives,” was based on *Davis v. EPA*, 348 F.3d 772 (9th Cir.2003). 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 sections of the Clean Air Act, Section 211(k). In arriving at its conclusion, the *Davis* court reasoned:

The structure of [Section 211(c)(4)] makes it clear that 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)]. 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)].

Davis, 348 F.3d at 786. This Court further relied on *Oxygenated Fuels Ass’n v. Davis*, 331 F.3d 665 (9th Cir.2003), wherein the Ninth Circuit ruled that California has “substantial latitude in regulating, and choosing among, *fuel additives* under the (c)(4)(B) exemption.” 331 F.3d at 669 (emphasis added). 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 *Oxygenated Fuels* Court explained:

“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).”

Oxygenated Fuels, 331 F.3d at 670 (emphasis in original). The Court rejected CARB’s attempt to distinguish *Davis* and *Oxygenated Fuels*. While the *Oxygenated Fuels* Court found that the Clean Air Act “explicitly contemplates that California can, in some instances, place restrictions on fuel additives” *Id.* at 670-71, this Court rejected CARB’s position that “by extension” California may regulate “fuels themselves.” This Court concluded that preemption exception is also limited to fuel additives and components.

In this motion, CARB maintains that California’s authority pursuant to Section 211(c)(4)(B) is broader

than the Section 211(c)(4)(A) preemption provision. CARB points 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. Moreover, CARB contends that because Congress made no effort to replicate or incorporate this terminology into Section 211(c)(4)(B), this Court should infer that California’s power to “control” should be as broad in scope as the EPA’s power to control fuels pursuant to Section 211(c)(1). 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). Based on these arguments, this Court shall revisit its interpretation of Section 211(c)(4)(B).

“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). In addition, when considering the scope of Section 211(c)(4)(B), this Court is mindful that it fits as an exception to a preemption statute. “As a result, any understanding of the scope of a preemption 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, 135 L.Ed.2d 700 (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. Easterwood*, 507 U.S. 658, 664, 113 S.Ct. 1732, 123 L.Ed.2d 387 (1993). “Nonetheless, ‘[p]reemption provisions are narrowly and strictly construed.’” *Montalvo v. Spirit Airlines*, 508 F.3d 464, 474 (9th Cir.2007).

To determine the meaning and scope of Section 211(c)(4)(B), then this Court first considers the plain language of the statute. Section 211(c)(4)(B) reads, in pertinent part:

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 additive.*

Id. (emphasis added). The plain language of Section 211(c)(4)(B) is broader in scope than the preemption language of Section 211(c)(4)(A), which preempts any “control or prohibition respecting *any characteristic or component of a fuel or fuel additive* in a motor vehicle or motor vehicle engine.” Pursuant to a plain reading of the statute, then, California would be not be preempted in the field of *fuels and fuel additives* for the purpose of motor vehicle emission control.

This broader reading of Section 211(c)(4)(B) is supported by the structure of Section 211(c). Section 211(c)(1) grants EPA broad authority to:

control or prohibit the manufacture, introduction into commerce, offering for sale, or sale of any fuel or fuel additive for use in a motor vehicle . . . if, in the judgment of the [EPA], any fuel or fuel additive or any emission product of such fuel or fuel additive causes, or contributed to air pollution or water pollution . . . that may reasonably be anticipated to endanger the public health or welfare[.]

Section 211(c)(2) sets forth the procedures EPA must follow before it can control or prohibit a “fuel or fuel additive.” Section 211(c)(4)(A) presents an express preemption, prohibiting states from prescribing or attempting to enforce “any control or prohibition respecting any characteristic or component of a fuel or fuel additive in a motor vehicle” if (i) the EPA has found no control or prohibition of the characteristic or component of a fuel or fuel additive is necessary; or (ii) the EPA has prescribed a control or prohibition applicable to such characteristic or component of a fuel or fuel additive. Section 211(c)(4)(B), as quoted above, provides a broader exemption from express preemption, to allow California to prescribe and enforce, for the purpose of motor vehicle emission control, a control or prohibition respecting any fuel or fuel additive. Finally, Section 211(c)(4)(C) allows all states to “prescribe and enforce, for purposes of motor vehicle emission control, a control or prohibition respecting the use of a fuel or fuel additive in a motor vehicle” if the applicable implementation plan for that state so provides or the EPA so approves. Instead, pursuant to Section 211(c), the EPA asserts a field preemption over fuels and fuel additives in Section 211(c)(1), an express preemption over components of fuels and fuel additives in Section 211(c)(4)(A), exempts California from field preemption over fuels

and fuel additive regulations for the purpose of motor vehicle emission control, and sets forth ways in which other states may prescribe and enforce controls or prohibitions of fuel or fuel additives for purpose of motor vehicle emission control. When considered in context of the broader statutory scheme, Section 211(c)(4)(A) and Section 211(c)(4)(B) are not precisely coextensive for all purposes.

Moreover, a broader reading of Section 211(c)(4)(B) comports with Congressional purposes. Through the Clean Air Act, Congress has a general purpose to preserve the police powers to the states except where explicitly preempted. “Because it is assumed that Congress does not cavalierly decide to override state authority, there is a general presumption against preemption in areas traditionally regulated by states.” *Davis*, 331 F.3d at 668. The Court begins “with the assumption that the historic police powers of the States were not to be superseded by the Federal Act unless that was the clear and manifest purpose of Congress.” *Rice v. Santa Fe Elevator Corp.*, 331 U.S. 218, 230, 67 S.Ct. 1146, 91 L.Ed. 1447 (1947). Moreover, in granting California a special exemption from the express preemption, Congress “clearly intended to allow California substantial latitude in regulating” fuels. *Oxygenated Fuels*, 331 F.3d at 669. A broader reading of the Section 211(c)(4)(B) allows California this broader latitude to regulate fuels for the purpose of emissions control.

Defendants continue to assert that Section 211(c)(4)(B) applies only to controls relating to “components or characteristics of fuels or fuel additives.” Defendants rely on this Court’s Motion to Dismiss Order and *Oxygenated Fuels*, wherein the Ninth Circuit explained that Section 211(c)(4)(A) and

Section (c)(4)(B) must be read together, and that the “two provisions are precisely coextensive.” *Oxygenated Fuels*, 331 F.3d at 670.

Defendants argue that this Court cannot reconsider the legal conclusions set forth in its Motion to Dismiss Order because those legal conclusions are the law of the case. The law of the case doctrine, however, is not an absolute bar to revisiting issues of law. The law of the case doctrine “merely expresses the practice of courts generally to refuse to reopen what has been decided, not to a limit on their power.” *Messenger v. Anderson*, 225 U.S. 436, 444, 32 S.Ct. 739, 56 L.Ed. 1152 (1912) (Holmes, J.) (quoted with approval in *United States v. Miller*, 822 F.2d 828, 832 (9th Cir.1987)). “The law of the case doctrine does not impinge on a district court’s power to reconsider its own interlocutory order so long as the court has not been divested of jurisdiction over that order by commencement of appeal.” *City of Los Angeles v. Santa Monica Baykeeper*, 254 F.3d 882, 888-89 (9th Cir.2001). Accordingly, this Court may reconsider its prior legal conclusions to the extent they are argued in this motion.

Having reconsidered the context and meaning of Section 211(c)(4)(B), this Court finds that the language in *Oxygenated Fuels* is distinguishable from the question presented here, and does not control this analysis. In *Oxygenated Fuels*, the court considered whether a fuel control made for the purpose of preventing groundwater contamination fell within the Section 211(c)(4)(B) preemption exception. The court found that the regulation was not expressly exempted from preemption, because it was not enacted for the purpose of emission control. In so ruling the court explained:

“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).”

Id. (emphasis in original). Thus, the court considered the two provisions with respect to whether the purpose of the control or prohibition was for motor vehicle emission control and ruled that these sections are “precisely co-extensive” to the extent that they apply to “fuel control provision[s] for the purpose of emission control.” *Id.* The court did not consider whether the plain language of these provisions were parallel in other respects. Indeed, as set forth above, the plain language of Section 211(c)(4)(B) parallels the other provisions of Section 211(c), whereas the “characteristics and components” restriction in Section 211(c)(4)(A) is unique and deviates from all other provisions.

Preemption analysis requires a close examination of the particular statutes and regulations at issue. “Each case turns on the peculiarities and special features of the federal regulatory scheme in question.” *City of Burbank v. Lockheed Air Terminal, Inc.*, 411 U.S. 624, 638, 93 S.Ct. 1854, 36 L.Ed.2d 547 (1973). Considering the plain language of the statute, the statutory context, and the regulatory scheme in question, this Court finds that Section 211(c)(4)(B) exempts California from federal preemption with respect to any control respecting *any fuel or fuel additive* for the purpose of emission control.

C. Whether the LCFS is a control respecting any fuel or fuel additive

Plaintiffs argue that the LCFS is not exempt from preemption pursuant to Section 211(c)(4)(B), because it 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.” FSOR at 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.

ISOR, V-30 (Mar. 2009). Defendants argue that while the LCFS regulates “how a fuel or blendstock was made,” it does not regulate a component or characteristic of a fuel or fuel additive.

Undisputedly, the LCFS is a control respecting fuels. Indeed, it controls several motor fuels, including the components of CARBOB and diesel, and the many reformulations of those fuels. In addition, the LCFS controls fuel carbon. As set forth above, however, this Court finds that Section 211(c)(4)(B) applies to a control respecting any fuel or fuel additive. Based on these undisputed facts, this Court finds that the LCFS is a control respecting a fuel or fuel additive within the meaning of Section 211(c)(4)(B).

D. Conclusion

To fit within the Section 211(c)(4)(B) preemption exemption, the LCFS must be a control respecting a fuel or fuel additive enacted for the purpose of emissions control. For the reasons set forth above, this Court finds that the LCFS is a control respecting a fuel or fuel additive and was enacted for the purpose of emissions control. Accordingly, the Section 211(c)(4)(B) preemption exemption authorizes to the LCFS. That is, the LCFS is excused expressly from a preemption challenge based on federal fuels regulations set forth in Section 211(c).³

³ As this Court explains below, however, this preemption exception does not allow California unfettered authority to conflict with other federal laws, including Section 211(o).

II. Defendants' Challenges to Plaintiffs' Preemption Claim

A. Whether Section 211(c)(4)(B) Exempts the LCFS from Preemption Analysis

Defendants re-assert an argument that this Court rejected in its Motion to Dismiss order; namely, that preemption principles do not apply in this action. Defendants argue that because this action involves an alleged conflict between two federal statutes or statutory provisions, the Supremacy Clause is not implicated. As this Court explained in its Motion to Dismiss Order, Defendants 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) . . .

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 [v. American Honda Motor Co., Inc.]*, 529 U.S. [861] at 869, 120 S.Ct. 1913 [146 L.Ed.2d 914 (2000)].

719 F.Supp.2d. at 1187-88. For these reasons, this Court rejects Defendants' argument.

B. Scope of Section 211(c)(4)(B), EISA's Savings Clause, and Conflict Preemption Principles

Although this Court finds that the LCFS is authorized pursuant to Section 211(c)(4)(B), this Court rejects Defendants' arguments to the extent that they assert that Section 211(c)(4)(B) allows unfettered authority to enact fuels regulations without being subject to conflict preemption scrutiny. For the reasons set forth below, this Court finds that Section 211(c)(4)(B) does not authorize California to enact and enforce fuel standards that conflict with federal laws, including other provisions of the Clean Air Act such as EISA, Section 211(o).

Section 211(c)(4)(B) "must be read in conjunction with" other Section 211 provisions. *Davis*, 348 F.3d at 786. Federal preemption, and California's preemption exceptions, differ under each Section 211 subsection. For example, while California has an exemption from preemption of motor vehicle fuel components and additives for the purpose of motor vehicle emissions under Section 211(c), California must 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; namely Section 211(k). This Court agrees that Section 211(c)(4)(B) permits "California to impose its own controls in addition to, rather than in lieu of" federal Clean Air Act provisions. *Davis*, 348 F.3d at 786.

Thus, while California is exempt from Section 211(c) preemption, the Section 211(c)(4)(B) exemption preemption does not grant California the authority to enact a regulation that conflicts with 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. "[W]hen two statutes are capable of co-existence, it is the duty of the courts . . . to regard each as effective." *Radzanower v. Touche Ross & Co.*, 426 U.S. 148, 155, 96 S.Ct. 1989, 48 L.Ed.2d 540 (1976). Moreover, this conclusion comports with *Davis*, in which the court found that Section 211(c)(4)(B) allows California, in certain instances, "to impose its own controls in addition to, rather than in lieu of" other provision of the Clean Air Act. 348 F.3d at 786. Accordingly, this Court must consider the preemption question to determine whether the LCFS is an a permissible additional control or whether the LCFS impermissibly conflicts with Section 211(o).

As this Court ruled in its Motion to Dismiss Order, "state laws that fall within a savings clause and are therefore not expressly preempted are still subject to the 'ordinary working of conflict preemption principles.'" *Chicanos Por La Causa, Inc. v. Napolitano*, 558 F.3d 856, 866 (9th Cir.2009) (quoting *Geier*, 529 U.S. at 869, 120 S.Ct. 1913). Thus, the LCFS is subject to conflict preemption scrutiny notwithstanding EISA's savings clause, which reads:

Except as otherwise provided in Section 211(o)(12) of the Clear Air Act, nothing in the amendments made by this title to section 211(o) of the Clean Air Act shall be construed as superceding, or limiting, any more environmentally protective requirement under the Clean Air Act, or under

any other provision of State or Federal law or regulation, including any environmental law or regulation.

Pub. L. 110-140, 121 Stat. 1492, 1529, 204(b). According to this savings clause, CARB argues, none of the provisions of Section 211(o) limits or supercedes any more environmentally protective requirements of the Clean Air Act, including Sections 209(b), 211(c)(1), and 211(c)(4)(B), or state law or regulation, including the LCFS, unless Section 211(o)(12) provides otherwise. In addition, CARB submits that nothing in Section 211(o)(12) provides otherwise. Section 211(o)(12) provides: “Nothing in this subsection, or regulations issues pursuant to this subsection, shall affect or be construed . . . to expand or limit regulatory authority regarding carbon dioxide or any other greenhouse gases, for purposes of other provisions (including section 7475 of this title) of this chapter.” 42 U.S.C. § 7475(o)(12). Based on these provisions, CARB concludes that “nothing in 211(o), including the provisions regarding what plaintiffs 23 refer to as the ‘grandfathered’ corn ethanol facilities, may be construed to limit the regulatory authority that both EPA and California have under” the Clean Air Act. “Even where Congress has not completely displaced state regulation in a specific area, state law is nullified to the extent it actually conflicts with federal law.” *Fid. Fed. Sav. & Loan Assn. v. de la Cuesta*, 458 U.S. 141, 153, 102 S.Ct. 3014, 73 L.Ed.2d 664 (1982). Accordingly, this Court considers the LCFS under conflict preemption analysis, notwithstanding EISA’s savings clause.

Defendants argue at length that the Congressional intent is to preserve states’ authority in the area of air pollution and the preserve California’s unique

position as a leader in fuels regulations. Defendants contend that because of the history of California's fuels program and California's special status under the Clean Air Act, Congressional intent is clear that the LCFS is not preempted by Section 211(o). In addition, Defendants contend that Congress made clear that Section 211(o) is a self-contained program that does not affect what other federal agencies or states could do under other provisions of the Clean Air Act or state laws are regulations.

Defendants arguments related to the history of the Clean Air Act, its statutory scheme and EISA's savings clause relate to the scope of preemption. *See Engine Mfrs. Assn. v. South Coast Air Quality Management Distr.*, 498 F.3d 1031, 1039-40 (9th Cir.2007). These principles do not establish, however, that there is no conflict between the LCFS and EISA. Moreover, these principles do not bar Plaintiffs' claim that the LCFS impermissibly conflicts with EISA. "Under the Supremacy Clause, from which our preemption doctrine is derived, 'any state law, however clearly within a State's acknowledged power, which interferes with or is contrary to federal law, must yield.'" *Gade v. Nat'l Solid Wastes Management Ass'n*, 505 U.S. 88, 108, 112 S.Ct. 2374, 120 L.Ed.2d 73 (1992) (quoting *Felder v. Casey*, 487 U.S. 131, 138, 108 S.Ct. 2302, 101 L.Ed.2d 123 (1988)) (citation omitted); *see also De Canas v. Bica*, 424 U.S. 351, 357, 96 S.Ct. 933, 47 L.Ed.2d 43 (1976) ("Even state regulation designed to protect vital state interests must give way to paramount federal legislation"). Accordingly, this Court denies Defendants' motion to the extent they argue that either Section 211(c)(4)(B) or the EISA savings clause demonstrates that there is no conflict preemption.

C. Whether the LCFS Conflicts with Section 211(o)

This Court turns now to Defendants' argument that there is no conflict between Section 211(o) and the LCFS. Plaintiffs contend that the LCFS is preempted to the extent that it conflicts with Section 211(o), as modified by EISA. Defendants argue that Plaintiffs' preemption argument fails as a matter of law, because there is no *prima facie* conflict between EISA and the LCFS.

1. EISA and LCFS

Section 211(o) authorizes the federal RFS program, which sets volumetric mandates that are designed to assure that an increasing portion of biofuels have lifecycle carbon intensities at least 20% below those of gasoline, and that an increasing portion of advanced biofuels, such as cellulosic fuels, with lifecycle carbon intensities of less than half of those with gasoline. In creating the RFS2, Congress provided that corn ethanol made from plants that were constructed before December 19, 2007 (when Congress enacted EISA) could qualify for inclusion in those volumes even if some of those plants did not meet the 20% lifecycle carbon intensity reduction threshold. 42 U.S.C. § 7454(o)(2)(A)(i).

Defendants assert that the LCFS and RFS, while authorized by different sections of the Clean Air Act and state law, are complementary policies with several similarities. Both policies include a lifecycle accounting of GHG emissions. Both incorporate emissions resulting from indirect land use change. And both policies emphasize use of advanced fuels over petroleum.

Defendants also point out the differences between the LCFS and the RFS2. For example, while the

RFS regulates biofuels only, the LCFS applies to all transportation fuels. In addition, while the RFS regulates biofuels nationally, the LCFS applies to transportation fuels sold or offered for sale in California. Moreover, while the RFS2 includes a volumetric mandate, the LCFS does not mandate a specific increase in biofuel use (although that result is anticipated). Instead, the LCFS encourages the use of cleaner fuels through a market system of credits and caps.

Another difference between the national and California fuels policies, relevant to this litigation, is that the RFS has a threshold requirement for biofuels to qualify for the volumetric mandate. For newly constructed facilities making “conventional biofuels”—as opposed to advanced or cellulosic biofuels, and the only category into which corn ethanol applies—that threshold is a 20 percent reduction in GHG emissions. 42 U.S.C. § 7454(o)(2). As mentioned above, corn ethanol made from existing plants were not required to meet the 20% lifecycle carbon intensity reduction threshold. 42 U.S.C. § 7454(o)(2)(A)(i). In contrast, the LCFS has no threshold requirement. Under the LCFS, all fuel providers are required to comply with the obligations set forth for that year across their entire product supply.

2. Applicable 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. Under the Supremacy Clause, “Congress has the authority, when acting pursuant to its enumerated powers, to preempt state and local law.” *Oxygenated Fuels*, 331 F.3d at

667. When considering the scope of preemption, the Court considers Congressional purpose, which is the “ultimate touchstone of preemption analysis.” *Lorillard Tobacco Co. v. Reilly*, 533 U.S. 525, 541, 121 S.Ct. 2404, 150 L.Ed.2d 532 (2001) (internal quotations omitted).

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, 107 S.Ct. 805, 93 L.Ed.2d 883 (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, 110 S.Ct. 2270, 110 L.Ed.2d 65 (1990). “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, 37 L.Ed.2d 163 (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). 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, 107 S.Ct. 805 (quoting *Hines v. Davidowitz*, 312 U.S. 52, 67, 61 S.Ct. 399, 85 L.Ed. 581 (1941)).

3. Discussion

Plaintiffs allege the LCFS fails based on the second type of conflict preemption; to wit, that the LCFS is preempted by Section 211(o), because the LCFS “stands as an obstacle to the accomplishment and execution of the full purposes and objective of

Congress.” 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. Plaintiffs further allege that the LCFS and EISA use 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. Moreover, 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. Plaintiffs contend that while the protection of the first generation of United States corn ethanol producers serves EISA’s purposes of energy security and protection from foreign energy independence, the LCFS frustrates this purpose by threatening to shut down the first generation corn ethanol producers. 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. 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 Mgmt. Ass’n.*, 505 U.S. 88, 103, 112 S.Ct. 2374, 120 L.Ed.2d 73 (1992).

Defendants contend that Plaintiffs' facial preemption challenge fails as a matter of law because parts of the LCFS do not conflict with Section 211(o). "A facial challenge to a [statute] is . . . the most difficult challenge to mount successfully, since the challenger must establish that no set of circumstances exists under which the [statute] would be valid." *United States v. Salerno*, 481 U.S. 739, 745, 107 S.Ct. 2095, 95 L.Ed.2d 697 (1987). "In particular, a generally applicable statute is not facially invalid unless the statute 'can *never* be applied in a constitutional manner.'" *United States v. Kaczynski*, 551 F.3d 1120, 1124-25 (9th Cir.2009) (quoting *Lanier v. City of Woodburn*, 518 F.3d 1147, 1150 (9th Cir.2008) (drug testing policy not facially invalid because the challenger failed to provide a reason why the policy could not be constitutionally applied to applicants for certain types of jobs)) (emphasis in original).

Defendants assert that Plaintiffs cannot meet these high standards because the LCFS regulates fuels that the federal law does not purport to reach. Plaintiffs' preemption claim is based on Section 211(o) of the Clean Air Act, which limits its scope to renewable fuels, whereas the LCFS applies to multiple transportation fuels that are not regulated by the RFS2. Because the list of fuels covered by the LCFS is broader than the fuels regulated by the RFS2, and because Plaintiffs' preemption claim is based on one sub-category of renewable fuel (corn ethanol), Defendants contend that the LCFS' regulation of fuels that fall outside of renewable fuels cannot conflict with Section 211(o). Based on the assertion that some provisions of the LCFS do not conflict with Section 211(o), Defendants conclude that this Court is

compelled to enter judgment in their favor pursuant to the stringent *Salerno* standard.

The Court must first determine the appropriate standard of review. Defendants assert that *Salerno* compels this Court to reject Plaintiffs' facial challenge *in toto* if any provision of the LCFS can be valid under any set of circumstances. The *Salerno* formulation, however, has been criticized and questioned by Supreme Court, which rarely applies the "no set of circumstances" test to facial challenges. *See, e.g., City of Chicago v. Morales*, 527 U.S. 41, 55 n. 22, 119 S.Ct. 1849, 144 L.Ed.2d 67 (1999) ("To the extent we have consistently articulated a clear standard for facial challenges, it is not the *Salerno* formulation, which has never been the decisive factor in any decision of this Court, including *Salerno* itself."). Moreover, to the extent that the *Salerno* "no set of circumstances" test has been applied to facial challenges, those challenges are to a *federal* law that infringes on either a First or Fourth Amendment right. Plaintiffs do not establish that the *Salerno* formulation is applicable to facial challenges to a *state* law based on a theory of conflict preemption.⁴

⁴ Although quoted often, the *Salerno* formulation is not applied frequently and, in some cases, is rejected. *See, e.g., Planned Parenthood of S. Ariz. v. Lawall*, 307 F.3d 783, 786 & n. 1 (9th Cir.2002) ("To the extent that the district court relied upon the standard of review in [*Salerno*], it was incorrect.") (rejecting *Salerno* and adopting an "undue burden" test in a facial challenge to an abortion statute). *See also*, Richard H. Fallon, Jr., "Fact and Fiction About Facial Challenges," 99 CAL. L.REV. 915, 930, 948–50 (2011); Michael C. Dorf, "Facial Challenges to State and Federal Statutes," 64 STAN. L.REV. 235 (1993–94). The undue burden test may be more appropriate under the circumstances of this action. "A finding of an undue burden is shorthand for the conclusion that a *state regulation has the purpose or effect of*

Moreover, Defendants fail to establish that there are “no set of circumstances” under which the LCFS does not frustrate the purpose of Section 211(o). Plaintiffs’ argument focuses on the lack of an actual conflict between the LCFS’ regulation of non-renewable fuels and Section 211(o), which only regulates renewable fuels. Plaintiffs’ claim, however, that the LCFS acts as an obstacle to the full purpose and effect of Section 211(o). Thus, Defendants do not challenge Plaintiffs’ claim in this motion.

While this Court is not convinced that the *Salerno* standard applies to a facial challenge of a state regulation that is alleged to frustrate the purposes and goals of a federal statute, Plaintiffs rely on a case that discusses the *Salerno* standard in relation to a preemption challenge to a state regulation. *In Engine Mfrs. Ass’n v. South Coast Air Quality Management Dist.*, 498 F.3d 1031 (9th Cir.2007), the Ninth Circuit reversed the district court’s decision to find a set of regulations invalid *in toto* because at least one provision of the multi-faceted regulation was valid. Although the Ninth Circuit did not apply the “no set of circumstances” principle, the Court explained that “*Salerno* does not requires a plaintiff to show that every provision within a particular multifaceted enactment is invalid.” *Id.* at 1049. To the contrary, under *Salerno*, “some of the provisions might be facially invalid, and [some] might not.” *Id.* Plaintiffs argue that based on this interpretation, it is no defense to Plaintiffs’ preemption claims that provisions of the LCFS that do not regulate renewable fuel might not

placing a substantial obstacle in the path of a [woman’s federal right, as defined by the Supreme Court].” Planned Parenthood v. Casey, 505 U.S. 833, 877, 112 S.Ct. 2791, 120 L.Ed.2d 674 (1992) (emphasis added).

conflict with Section 211(o). Plaintiffs conclude that even if a statute is alleged to be invalid facially in its entirety, a Court must make a determination whether each “particular challenged provision” is preempted first. *Id.* Plaintiffs argue further that severability is a separate issue, to be considered after the court determines whether each provision is preempted.

According to *Engine Mfrs.*, this Court must first determine whether the LCFS is a regulation made up of multiple provisions or whether it is a single, unseverable provision. If the LCFS is made up of multiple provisions, then this Court must consider Plaintiffs’ preemption challenge as to each provision offending provision separately. If, on the other hand, the LCFS is a single, unseverable provision, this Court must reject the LCFS in toto if the offending section of the LCFS conflicts with Section 211(o).⁵ The Ninth Circuit explained:

Where a plaintiff challenges an enactment as *prima facie* invalid, *Salerno* requires the plaintiff to show that there can be no valid application of a particular challenged provision. However, *Salerno* does not

⁵ Within facial challenge jurisprudence, there is an presumption of severability. The issue of severability of a state statute, however, is not a matter of constitutional law. In addition, a “court does not sever a statute prior to determining whether it is facially valid. Rather, a court will sever a statute when a portion of it is found unconstitutional and that portion can be excised from the statute without altering the statute’s intended purpose.” *United States v. Kaczynski*, 551 F.3d 1120, 1125 (9th Cir.2009). Nevertheless, this Court must determine whether the LCFS contains multiple provisions, or whether it is a single, unseverable provision pursuant to *Engine Mfrs. Ass’n v. South Coast Air Quality Management Dist.*, 498 F.3d 1031 (9th Cir.2007). Moreover, Defendants’ motion fails because they failed to challenge that portion of the state which may or may not be excised.

require a plaintiff to show that every provision within a particular multifaceted enactment is invalid. When a statute contains unobjectionable provisions that are separable from those found to be unconstitutional, a court reviewing the statute should maintain the statute is no far as it is valid. In other words, some of the provisions might be facially invalid, and might not.

Each Fleet Rule contains multiple provisions, placing restrictions on specific lists of public or private entities. Those provisions within the Rules that constitute state proprietary action are valid provisions, not valid applications of a single, unseverable provision.

498 F.3d at 1049-50 (emphasis in original) (internal quotations and citations omitted). The Court then remanded the action to the district court “to decide in the first instance whether the remaining provisions of the [regulation] are preempted by the Clean Air Act.” *Id.*

Under this standard, Defendants fail to establish that the LCFS is valid *in toto* because some provisions of the LCFS do not conflict with Section 211(o). Defendants do not raise the issue of nonseverability and fail to challenge the offending provision of the LCFS as invalid in their moving papers. Although Defendants argue that LCFS is not a series of severable restrictions on dissimilar entities, but a single, integrated market-based compliance mechanism that applies to all fuel providers in the California market in their reply, Plaintiffs did not have the ability to respond to this argument in their opposition. Defendants point out that Plaintiffs made no attempt in their opposition to isolate the offending portion; however, Defendants do isolate the offending portions of the LCFS in their complaint, whereas, Defendants

made no attempt in their moving papers to establish that the offending portion was invalid. For this reason, Defendants' argument fails.

In addition, this Court rejects Defendants' position that the LCFS is more similar to other cases wherein the Ninth Circuit rejected a facial challenge to a statute because "a generally applicable statute is not facially invalid unless that statute can never be applied in a constitutional manner." *United States v. Kaczynski*, 551 F.3d 1120, 1125 (9th Cir.2009). As set forth above, those cases are facial challenges of simple federal statutes based on the First or Fourth Amendment. Defendants have failed to establish that the *Salerno* standard applies to the Plaintiffs' conflict preemption challenge to the LCFS.

III. Whether Section 211(c)(4)(B) Insulates Defendants from Commerce Clause Scrutiny

Defendants again rely on Section 211(c)(4)(B) to argue that the Section 211(c)(4)(B) insulates the LCFS from the Commerce Clause. 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 "all fuels and fuel additives for 211(c)(4)(B) expressly authorizes California to regulate 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, 104 S.Ct. 2237, 81 L.Ed.2d 71 (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, 102 S.Ct. 3456, 73 L.Ed.2d 1254 (1982). Defendants bear the burden of “demonstrating [this] clear and unambiguous intent.” *Wyoming v. Oklahoma*, 502 U.S. 437, 458, 112 S.Ct. 789, 117 L.Ed.2d 1 (1992). According to these standards, Plaintiffs’ Commerce Clause claims fails as a matter of law if Defendants establish that Congress expressly, unmistakably, and

unambiguously authorized California to violate the Commerce Clause.

In its Motion to Dismiss Order, this Court rejected Defendants' argument that Section 211(c)(4)(B) insulated Defendants from Commerce Clause scrutiny:

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.

Rocky Mountain Farmers Union, 719 F.Supp.2d at 1196. "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." *Id.* (citing *New England Power Co. v. New Hampshire*, 455 U.S. 331, 341, 102 S.Ct. 1096, 71 L.Ed.2d 188 (1982)). 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, 100 S.Ct. 2009, 64 L.Ed.2d 702 (1980).

Moreover, the savings clauses of the Clean Air Act and the EISA do not authorize defendants to violate the Commerce Clause. *See Wyoming*, 502 U.S. at 458, 112 S.Ct. 789; *Sporhase*, 458 U.S. at 960, 102 S.Ct. 3456; *New England Power*, 455 U.S. at 343, 102 S.Ct. 1096; *Lewis*, 447 U.S. at 48-49, 100 S.Ct. 2009. 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 power otherwise imposed by the Commerce Clause.” *New England Power*, 455 U.S. at 341, 102 S.Ct. 1096. 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, 100 S.Ct. 2009.

For these reasons, 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 or unambiguous authority for California to violate the Commerce Clause. Section 211(c)(4)(B) exempts California from federal preemption in regulating fuels and fuel additives for the purposes of motor vehicle emissions control only. 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, 104 S.Ct. 2237. Similarly,

Defendants have failed to establish that the savings clauses demonstrate express exemption from Commerce Clause scrutiny. Accordingly, Defendants fail to support their position that “there is no limitation whatsoever as to any extraterritorial impact of a California fuels regulation.” This Court denies summary adjudication on this issue.

IV. Defendants Other Challenges on the Merits of Plaintiffs’ Claims

Defendants further move for judgment in their favor on the merits of Plaintiffs’ claims. Defendants argue that as a matter of law, the LCFS’ treatment of ethanol or crude oil does not discriminate facially against out-of-state ethanol entities. In addition, Defendants argue that the LCFS does not regulate extraterritorially and does not have a discriminatory purpose. To the extent this Court reaches this arguments to resolve these cross-motions, this Court shall address Defendants’ arguments in Plaintiffs’ separate summary judgment motions.

CONCLUSION AND ORDER

For the foregoing reasons, this Court:

1. GRANTS Defendants’ summary adjudication motion to the extent that this Court finds that the LCFS is a control or prohibition respecting a fuel or fuel component, as defined by Section 211(c)(4)(B) of the Clean Air Act;
2. DENIES Defendants’ summary adjudication motion to the extent that Defendants argue that Section 211(c)(4)(B) insulates the LCFS from preemption or Commerce Clause challenges;
3. DENIES without prejudice Defendants’ summary adjudication motion to the extent Defendants’

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argue that the LCFS does not conflict with, and is not preempted by, Section 211(o) of the Clean Air Act, because no party has addressed the appropriate standard of review for this preemption challenge; and

4. RESERVES judgment on Defendants' remaining arguments, which shall be addressed in the Plaintiffs' separate summary judgment motions to the extent this Court reaches those arguments.

IT IS SO ORDERED.

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APPENDIX E

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF CALIFORNIA

[Filed 12/29/11]

Case No: 1:09-CV-02234-LJO-GSA

ROCKY MOUNTAIN FARMERS UNION, *et al.*,

v.

JAMES N. GOLDSTENE, *et al.*,

JUDGMENT IN A CIVIL CASE

XX Decision by the Court. This action came to trial or hearing before the Court. The issues have been tried or heard and a decision has been rendered.

IT IS ORDERED AND ADJUDGED

THAT JUDGMENT IS HEREBY ENTERED IN ACCORDANCE WITH THE COURT'S ORDER FILED ON 12/29/2011

Victoria C. Minor

Clerk of Court

ENTERED: December 29, 2011

by: /s/ S. Martin-Gill

Deputy Clerk

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APPENDIX F

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF CALIFORNIA

[Filed 12/29/11]

Case No: 1:09-CV-02234-LJO-GSA

ROCKY MOUNTAIN FARMERS UNION, *et al.*,

v.

JAMES N. GOLDSTENE, *et al.*,

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FILED ON 12/29/2011

Victoria C. Minor

Clerk of Court

ENTERED: December 29, 2011

by: /s/ S. Martin-Gill

Deputy Clerk

APPENDIX G

UNITED STATES COURT OF APPEALS
NINTH CIRCUIT

Nos. 12-15135, 12-15131
D.C. Nos. 1:09-cv-02234-LJO-GSA
1:10-cv-00163-LJO-DLB

ROCKY MOUNTAIN FARMERS UNION; REDWOOD COUNTY
MINNESOTA CORN AND SOYBEAN GROWERS; PENNY
NEWMAN GRAIN, INC.; REX NEDEREND; FRESNO
COUNTY FARM BUREAU; NISEI FARMERS LEAGUE;
CALIFORNIA DAIRY CAMPAIGN; GROWTH ENERGY;
RENEWABLE FUELS ASSOCIATION; AMERICAN FUEL &
PETROCHEMICAL MANUFACTURERS ASSOCIATION, FKA
NATIONAL PETROCHEMICAL & REFINERS ASSOCIATION;
AMERICAN TRUCKINGS ASSOCIATIONS; CENTER FOR
NORTH AMERICAN ENERGY SECURITY; THE CONSUMER
ENERGY ALLIANCE,

Plaintiffs-Appellees,

v.

RICHARD W. COREY, IN HIS OFFICIAL CAPACITY AS
EXECUTIVE OFFICER OF THE CALIFORNIA AIR
RESOURCES BOARD; 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, IN HIS
OFFICIAL CAPACITY AS MEMBER OF THE CALIFORNIA AIR
RESOURCES BOARD; RONALD O. LOVERIDGE, IN HIS
OFFICIAL CAPACITY AS MEMBER OF THE CALIFORNIA AIR
RESOURCES BOARD; EDMUND G. BROWN, JR., IN HIS
OFFICIAL CAPACITY AS GOVERNOR OF THE STATE OF
CALIFORNIA; KAMALA D. HARRIS, ATTORNEY GENERAL,

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IN HER OFFICIAL CAPACITY AS ATTORNEY GENERAL OF
THE STATE OF CALIFORNIA,

Defendants-Appellants,

ENVIRONMENTAL DEFENSE FUND; NATURAL
RESOURCES DEFENSE COUNCIL; SIERRA CLUB;
CONSERVATION LAW FOUNDATION,

Intervenor-Defendants-Appellants.

ROCKY MOUNTAIN FARMERS UNION; REDWOOD COUNTY
MINNESOTA CORN AND SOYBEAN GROWERS; PENNY
NEWMAN GRAIN, INC.; REX NEDEREND; FRESNO COUNTY
FARM BUREAU; NISEI FARMERS LEAGUE; CALIFORNIA
DAIRY CAMPAIGN; GROWTH ENERGY; RENEWABLE
FUELS ASSOCIATION; AMERICAN FUEL &
PETROCHEMICAL MANUFACTURERS ASSOCIATION, FKA
NATIONAL PETROCHEMICAL & REFINERS ASSOCIATION;
AMERICAN TRUCKINGS ASSOCIATIONS; CENTER FOR
NORTH AMERICAN ENERGY SECURITY;
THE CONSUMER ENERGY ALLIANCE,

Plaintiffs-Appellees,

v.

RICHARD W. COREY, IN HIS OFFICIAL CAPACITY AS
EXECUTIVE OFFICER OF CALIFORNIA AIR RESOURCES
BOARD; 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, IN HIS OFFICIAL CAPACITY
AS MEMBER OF THE CALIFORNIA AIR RESOURCES BOARD;
RONALD O. LOVERIDGE, IN HIS OFFICIAL CAPACITY AS
MEMBER OF THE CALIFORNIA AIR RESOURCES BOARD;
EDMUND G. BROWN, JR., IN HIS OFFICIAL CAPACITY AS
GOVERNOR OF THE STATE OF CALIFORNIA; KAMALA D.
HARRIS, ATTORNEY GENERAL, IN HER OFFICIAL CAPACITY
AS ATTORNEY GENERAL OF THE STATE OF CALIFORNIA,

Defendants-Appellants,

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ENVIRONMENTAL DEFENSE FUND; NATURAL
RESOURCES DEFENSE COUNCIL; SIERRA CLUB;
CONSERVATION LAW FOUNDATION,
Intervenor-Defendants-Appellants.

Jan. 22, 2014

ORDER

Before: DOROTHY W. NELSON, RONALD M.
GOULD, and MARY H. MURGUIA, Circuit Judges.

Concurrence by Judge GOULD; Dissent by Judge
MILAN D. SMITH, JR.

The full court was advised of the petitions for rehearing en banc. A judge requested a vote on whether to rehear the matter en banc, and the matter failed to receive a majority of the votes of the nonrecused active judges in favor of en banc consideration. Fed. R.App. P. 35.

The petitions for rehearing en banc are DENIED.

GOULD, Circuit Judge, concurring in the denial of rehearing en banc:

I respectfully file this separate concurrence in the denial order. In my view, the opinion and partial dissent fairly present the key issues in this appeal, and the denial order should be read with the majority opinion's reasoning in mind. But in light of the views of my dissenting colleagues, I offer supplemental observations.

First, the dissent is riddled with overstatements. For example, it claims that California's Low Carbon

Fuel Standard (“LCFS”)—and the ethanol provisions contained therein—explicitly discriminates against other states and is a “protectionist regulatory scheme that threatens to Balkanize our national economy.” Dissent at 512. Not only is this mere alarmist rhetoric, it also does not fit the reality of the California legislation. Moreover, although the dissent trumpets that nine states seek rehearing, the converse is that 41 do not. And some states, like Washington and Oregon, have already joined California in its endeavor to combat global warming by reducing greenhouse gas emissions from fuels. Finally, the dissent characterizes the LCFS as an extraterritorial regulation, and argues that the majority’s position to the contrary contravenes Supreme Court precedent. This is an incorrect view of the law: California is free to regulate commerce *within* its borders even if it has an ancillary goal of influencing the choices of actors in other states. *See Pharm. Research & Mfrs. of Am. v. Walsh*, 538 U.S. 644, 669, 123 S.Ct. 1855, 155 L.Ed.2d 889 (2003).

Second, the dissent is written as if the majority opinion conclusively determined that the LCFS was above constitutional reproach. It begins, for example, by accusing the majority of “upholding California’s ethanol regulations.” Dissent at 512. It later repeats this charge. *See* Dissent at 515. We did no such thing. Believing that findings of fact and more proceedings in the district court were needed to determine the LCFS’s constitutionality, we remanded. All we did, in other words, was to reject the argument that the LCFS’s ethanol provisions facially discriminate against out-of-state commerce. Our remand advises the district court to determine “whether the Fuel Standard’s ethanol provisions discriminate in purpose or in practical effect.” *Rocky Mtn. Farmers Union v. Corey*, 730 F.3d 1070, 1078 (9th Cir.2013). And we instructed the

district court to apply strict scrutiny to those provisions if it found that they did discriminate, or to apply the balancing test set forth in *Pike v. Bruce Church, Inc.*, 397 U.S. 137, 90 S.Ct. 844, 25 L.Ed.2d 174 (1970), if it found that they did not. *Rocky Mtn. Farmers Union*, 730 F.3d at 1078. The dissent acknowledges our remand, but it rhetorically argues that the remand has a “predestined” outcome, Dissent at 514, because of our statement that the LCFS incorporates state boundaries for “good and non-discriminatory” reasons, *Rocky Mtn. Farmers Union*, 730 F.3d at 1107. There is a simple response to this critique, which has no legal merit: We reviewed this case at the summary judgment stage. As such, we had to take as true all facts presented by California and reasonable inferences therefrom. Our statement, then, about good and non-discriminatory reasons for incorporating state boundaries into the LCFS methodology is based on evidence that had to be credited at the summary judgment stage. It will not control what the district court decides on remand as it considers the LCFS’s purpose and effect and makes factual findings on disputed evidence.

Similarly, the dissent asserts that our opinion “nullifies” constitutional limitations on states’ ability to legislate in ways that affect other states. Dissent at 513. I disagree. If the LCFS in purpose or practical effect discriminates against interstate commerce, such limitations still exist in the form of strict scrutiny. And even if it does not discriminate, the *Pike* balancing test imposes its own limitations on states’ ability to legislate in this arena.¹

¹ The dissent’s insistence that strict scrutiny should be applied to the regulatory provisions here, absent a finding of discriminatory purpose or effect, is a type of “archaic formalism” that

Third, the dissent argues that the LCFS's ethanol provisions facially discriminate against out-of-state commerce by drawing lines based on state borders, and that strict scrutiny therefore applies to invalidate the law. I disagree. For the reasons stated in the majority opinion, I believe that California made its geographic distinctions based on the carbon impact and intensity of various fuels, not on their state-of-origin. True, the LCFS does attribute different carbon intensity values to fuels from different geographic areas. CAL.CODE REGS. tit. 17, § 95486(b). But the dissent's argument that it is "clear that the challenged regulations discriminate against interstate commerce" is wide of the mark. Dissent at 21. A legislative geographic distinction is not facially discriminatory merely because it affects in-state and out-of-state interests unequally. Rather, as long as there is "some reason, apart from their origin, to treat them differently," California may distinguish between Midwestern, Brazilian, and California ethanols. *Philadelphia v. New Jersey*, 437 U.S. 617, 627, 98 S.Ct. 2531, 57 L.Ed.2d 475 (1978). The dissent disregards this principle. To the extent that California treats fuels based on their location, it does so for non-discriminatory reasons; if Midwestern ethanol is more carbon-intensive than its California counterpart, that is so not because of its origin but rather because of its method of production and other objective factors, including transportation-related emissions.

Further, the pathways set forth in the LCFS—and reproduced at the end of the majority opinion in

should not be encouraged by the Supreme Court. *Rocky Mtn. Farmers Union*, 730 F.3d at 1107. In my view, the Supreme Court has not applied strict scrutiny to provisions like those in the LCFS based on a theory of facial discrimination.

Appendix One—are not immutable legislative classifications. They are default pathways, and while they may be relied upon by producers, they may also be supplanted if a producer creates an individualized pathway by supplying its own data about the carbon emission impact of its product. This allows ethanol producers in California and elsewhere some control over the carbon intensity value assigned to their fuels. And it shows that the dissent’s position that the LCFS facially discriminates is incorrect. The LCFS’s ethanol provisions are based on an objective fact, carbon emissions, not on the constitutionally impermissible goal of benefitting local companies at the expense of foreign ones. Such a system does not warrant strict scrutiny.

The dissent notes that “the Fuel Standard expressly assigns a higher carbon intensity to Midwestern ethanol.” Dissent at 516. In fact, however, the lowest carbon intensity values yet—supplied by producers who went outside the default pathways to provide their own data—are from Midwestern and Brazilian ethanol producers. *See* CAL.CODE REGS. tit. 17, § 95486(b)(1); *Rocky Mtn. Farmers Union*, 730 F.3d at 1084. This is so largely because the LCFS takes into account carbon emissions from transportation, and most California ethanol producers import corn from the Midwest to make their product, whereas Midwestern ethanol producers, who have corn close by, avoid those transportation emissions. The geographic distinctions made by California, then, are not classifications based on state boundaries *per se*; rather, they are classifications based on the carbon impact of fuels as calculated under a rubric that considers transportation-related emissions. That does not warrant strict scrutiny unless the district court concludes that the LCFS discriminates against out-of-

state commerce in purpose or practical effect. That is why we remanded with instructions to consider such purpose and effect.

Fourth, the tone and substance of the dissent is perhaps aimed at encouraging Supreme Court review. A petition for writ of certiorari from the parties who sought rehearing is likely forthcoming, but our court properly declines to give its judicial imprimatur to the dissent's position. Because Supreme Court review is possible, however, I set forth my own views on that prospect. On the one hand, the Supreme Court's considered judgment could be helpful to clarify as soon as practical what states may do of their own accord to deter or slow global warming. The Supreme Court, if it wants to do so at this time, can set constitutional limits, binding in all circuits, as to what the individual states in our Union may do to combat global warming. The Supreme Court also can give meaning to, or limit, the general principle that state experimentation is often a desirable predicate to actions by other states or the federal government. On the other hand, the record in this case is incomplete and thus unsuitable for understanding the full scope of the issues presented. The panel remanded for findings on discriminatory purpose or effect which, if it exists, would invoke strict scrutiny. And, if not, the majority required on remand that the district court engage in *Pike* balancing, weighing the LCFS's benefits against its impact on interstate competition. The issues raised by the dissent, then, may be rendered moot by the district court's decision, and in any event there will be a more complete record, including findings on purpose and effect, on which to make a ruling about the controlling legal principles.

Fifth, the dissent contends that California admits its scheme will, by itself, have little effect in averting environmental catastrophe. Dissent at 516-17. This argument ignores not only the principle that incremental change, when aggregated, can be significant, but also the possibility that successful experimentation by California could lead to broader action by other states and/or the federal government. The Supreme Court has reminded us that it is “erroneous” to assume that “a small, incremental step, because it is incremental” is legally—or truly—insignificant. *Massachusetts v. EPA*, 549 U.S. 497, 524, 127 S.Ct. 1438, 167 L.Ed.2d 248 (2007). Just as a journey of 1,000 miles begins with a single step, so too must legislative action to fight global warming start somewhere. Further, once other states appreciate the benefits of the LCFS, there may be a cascade of similar laws throughout the country—and perhaps federal action—aimed at stemming the tide of global warming. Indeed, proposed legislation in Oregon and Washington is an example of this. *See Rocky Mtn. Farmers Union*, 730 F.3d at 1104 n. 14; Michael Wines, *Climate Pact Is Signed by 3 States and Partner*, N.Y. TIMES, Oct. 30, 2013, at A18 (noting an agreement between California, Oregon, and Washington, as well as British Columbia, to “raise the cost of greenhouse gas pollution, promote zero-emission vehicles and push for the use of cleaner-burning fuels in transportation” as part of a “broad alliance to combat climate change”).

Meanwhile, global temperatures are increasing, storms are intensifying, polar ice caps are melting, and seas are rising. If California’s experiment with the LCFS is to succeed in inducing increased production of alternative fuels and/or decreased carbon impact of existing fuels, the sooner it can proceed, the better; it

could take years, or decades, for other states to recognize the benefits of the LCFS, to react to it, and to engage in similar experiments themselves. Justice Brandeis recognized the importance of this sort of state experimentation in his now-famous dissent in *New State Ice Co. v. Liebmann*, when he wrote: “It is one of the happy incidents of the federal system that a single courageous state may, if its citizens choose, serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country.” 285 U.S. 262, 311, 52 S.Ct. 371, 76 L.Ed. 747 (1932) (Brandeis, J., dissenting). This is what California has done with the LCFS. The benefits that may flow from such cooperative state action do not, as the dissent urges, threaten to “Balkanize our national economy.” Dissent at 512. Rather, the development of alternative fuels and a market system regulating carbon emissions would likely benefit the national economy.

Sixth, the dissent’s argument that California’s “economic clout” means that the “practical effect” of the LCFS is to regulate commerce beyond California’s borders misstates the law. Dissent at 517-18. In fact, Supreme Court precedent points in a contrary direction. *See, e.g., Walsh*, 538 U.S. at 669, 123 S.Ct. 1855 (refusing to apply the extraterritoriality doctrine to a law that “does not regulate the price of any out-of-state transaction, either by its express terms or by its inevitable effect” (internal quotation marks omitted)). While a state may not mandate compliance with its preferred policies in wholly out-of-state transactions, it may regulate commerce within its boundaries even if one of its goals is to influence the out-of-state choices

of market participants. *See id.* This is what California permissibly has done with the LCFS.²

A majority of active judges on our court wisely refused to grant en banc consideration in this case. I concur in the order denying rehearing en banc.

M. SMITH, Circuit Judge, with whom O'SCANNLAIN, CALLAHAN, BEA, IKUTA, and N.R. SMITH, Circuit Judges, join, and with whom MURGUIA, Circuit Judge, joins as to Part III, dissenting from the denial of rehearing en banc:

In upholding California's ethanol regulations, the 2-1 majority in this case finds at least facially constitutional a protectionist regulatory scheme that threatens to Balkanize our national economy. In so doing, the majority disregards longstanding dormant Commerce Clause doctrine, and places the law of this circuit squarely at odds with Supreme Court precedent.

The deleterious effects of California's scheme on our national economic union are not speculative. The states of Nebraska, Illinois, Iowa, Kansas, Michigan, Missouri, North Dakota, Ohio, and South Dakota (which are major producers of corn and ethanol) filed

² If the dissent's position were adopted, it would spell the end of much beneficent state legislation. Let us assume, for example, that a safety-conscious state regulates automobiles, preventing them from being sold in that state absent certain safety protections like airbags or a performance standard requiring a minimum survival rate from a crash at 40 miles per hour. The dissent apparently would say that the safety-conscious state is regulating extraterritorially because its restrictions provide incentives to automakers in other states to make their cars safer if they wish to sell them in the safety-conscious state. I respectfully disagree. The Supreme Court has not said anything to that effect, and, as explained above, its precedent points in the opposite direction.

an amicus brief in support of en banc rehearing.¹ They argue that California’s ethanol regulations “impinge [] on the sovereign interests of the Amici States to regulate farming, ethanol production, and other activities within their own borders as they see fit.” These states further observe that California’s regulations “close[] the California border to ethanol produced in Amici States in favor of chemically-identical ethanol produced within California. . . .” These are the very types of concerns that generated the Supreme Court’s dormant Commerce Clause case law, and the panel majority ignores them.

Our federal system grants states substantial discretion to remedy perceived local problems. But the Constitution sharply constrains their power to do so at the expense of other states. Because the majority opinion nullifies any such limitations, I respectfully dissent from our failure to rehear this case en banc.

I.

In the Global Warming Solutions Act of 2006, California pledged to reduce its greenhouse gas emissions to 1990 levels by the year 2020. To implement this goal, the California Air Resources Board (CARB) promulgated the Low Carbon Fuel Standard (Fuel Standard). The Fuel Standard requires businesses that sell transportation fuels in California to reduce the “carbon intensity” of their fuels by ten percent before 2020. As CARB describes

¹ In his concurrence in the denial of rehearing en banc, Judge Gould notes that 41 states did not join in the amicus brief seeking en banc rehearing. This should be no surprise since one of those states is California, which promulgated the offending regulations, and most of the other states are not major corn or ethanol producers.

it, “[c]arbon 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.”

The Fuel Standard explicitly treats in-state and out-of-state ethanol differently in calculating carbon intensity.² Indeed, a fuel’s carbon intensity depends in part on the location where it is produced. All else equal, the regulations always assign a higher carbon intensity to Midwestern ethanol than ethanol from California. As such, CARB predicts that the Fuel Standard will soon eliminate Midwestern ethanol from the California market. Further, the regulations sweep beyond the borders of California. Because a fuel’s carbon intensity depends largely on out-of-state production and land use decisions, California’s scheme necessarily affects those processes.

On December 23, 2009, and February 2, 2010, Plaintiffs-Appellees filed suit in the United States District Court for the Eastern District of California, contending that California’s regulations violate the dormant Commerce Clause. Specifically, two groups of Plaintiffs led by the Rocky Mountain Farmers Union (Rocky Mountain) and the American Fuels & Petrochemical Manufacturers Association challenged the Fuel Standard’s ethanol regulations. On December 29, 2011, the district court agreed that the ethanol regulations violate the dormant Commerce Clause, awarded summary judgment on that basis, and granted Rocky Mountain’s motion for a preliminary injunction.

² For the sake of brevity, I focus on the majority’s endorsement of California’s ethanol regulations. But the panel’s approval of California’s sweeping crude oil regulations also merited en banc review.

On September 18, 2013, a divided panel of our court reversed and remanded in principal part. According to the majority, the Fuel Standard's ethanol regulations do not facially discriminate against interstate commerce because California has "good and non-discriminatory reason[s]" for treating out-of-state ethanol differently. *Rocky Mountain Farmers Union v. Corey*, 730 F.3d 1070, 1107 (9th Cir.2013). The majority further concluded that the regulations do not have extraterritorial reach because they merely provide incentives to out-of-state firms. The majority therefore reversed the judgment of the district court in relevant part, vacated the preliminary injunction, and remanded to the district court for consideration of whether the ethanol regulations "discriminate in purpose or in practical effect." *Id.* at 1078. The panel instructed the district court to apply strict scrutiny if it finds that they do, and to apply the balancing test established in *Pike v. Bruce Church, Inc.*, 397 U.S. 137, 90 S.Ct. 844, 25 L.Ed.2d 174 (1970), if it determines that they do not. *Rocky Mountain Farmers Union*, 730 F.3d at 1078. However, the majority made clear that the outcome of this analysis is predestined, instructing the district court that the regulations "incorporate state boundaries for good and nondiscriminatory reason[s]." *Id.* at 1107.

Judge Murguia concurred in part and dissented in part. While she agreed with the majority in some respects, she disagreed regarding the ethanol regulations. Judge Murguia determined that the ethanol regulations were facially discriminatory, and she concluded that they failed to withstand strict scrutiny because California could attempt to mitigate climate change through non-discriminatory means.

II.

In the name of combating “a new type of harm,” the majority rejects longstanding dormant Commerce Clause precedent as mere “archaic formalism.” *Rocky Mountain Farmers Union*, 730 F.3d at 1107. I therefore begin with a brief survey of the doctrine, and its critical place in our constitutional order.

“During the first years of our history as an independent confederation, the National Government lacked the power to regulate commerce among the States,” and “each State was free to adopt measures fostering its own local interests without regard to possible prejudice to nonresidents. . . .” *Camps Newfound/Owatonna, Inc. v. Town of Harrison, Me.*, 520 U.S. 564, 571, 117 S.Ct. 1590, 137 L.Ed.2d 852 (1997). This “conflict of commercial regulations, destructive to the harmony of the States. . . . was the immediate cause that led to the forming of a [constitutional] convention.” *Id.* (quoting *Gibbons v. Ogden*, 22 U.S. (9 Wheat.) 1, 224, 6 L.Ed. 23 (1824) (Johnson, J., concurring in the judgment)). Thus, as Justice Cardozo observed long ago, the Constitution “was framed upon the theory that the peoples of the several states must sink or swim together, and that in the long run prosperity and salvation are in union and not division.” *Baldwin v. G.A.F. Seelig, Inc.*, 294 U.S. 511, 523, 55 S.Ct. 497, 79 L.Ed. 1032 (1935).

To implement the Constitution’s objective of national economic unity, the Supreme Court “has consistently held that the Constitution’s express grant to Congress of the power to ‘regulate Commerce . . . among the several States,’ Art. I, § 8, cl. 3, contains ‘a further, negative command, known as the dormant Commerce Clause. . . .’” *Am. Trucking Ass’ns v. Mich. Pub. Serv. Comm’n*, 545 U.S. 429, 433, 125 S.Ct.

2419, 162 L.Ed.2d 407 (2005) (quoting *Okla. Tax Comm’n v. Jefferson Lines, Inc.*, 514 U.S. 175, 179, 115 S.Ct. 1331, 131 L.Ed.2d 261 (1995)).³ The dormant Commerce Clause promotes economic integration by “significantly limit[ing] the ability of States and localities to regulate or otherwise burden the flow of interstate commerce.” *McBurney v. Young*, ____ U.S.____, 133 S.Ct. 1709, 1719, 185 L.Ed.2d 758 (2013) (quoting *Maine v. Taylor*, 477 U.S. 131, 151, 106 S.Ct. 2440, 91 L.Ed.2d 110 (1986)). “It is driven by a concern about ‘economic protectionism—that is, regulatory measures designed to benefit in-state economic interests by burdening out-of-state competitors.’” *McBurney*, 133 S.Ct. at 1719 (quoting *New Energy Co. of Ind. v. Limbach*, 486 U.S. 269, 273-74, 108 S.Ct. 1803, 100 L.Ed.2d 302 (1988)).

In upholding California’s sweeping and discriminatory ethanol regulations, the majority brushes aside two foundational tenets of dormant Commerce Clause jurisprudence. First, the majority gives short shrift to the principle that “[s]tate laws that discriminate against interstate commerce face ‘a virtually *per se* rule of invalidity.’” *Granholm v. Heald*, 544 U.S. 460, 476, 125 S.Ct. 1885, 161 L.Ed.2d 796 (2005) (quoting *Philadelphia v. New Jersey*, 437 U.S. 617,

³ “The ‘negative’ aspect of the Commerce Clause was considered the more important by the ‘father of the Constitution,’ James Madison. In one of his letters, Madison wrote that the Commerce Clause ‘grew out of the abuse of the power by the importing States in taxing the non-importing, and was intended as a negative and preventive provision against injustice among the States themselves, rather than as a power to be used for the positive purposes of the General Government.’” *W. Lynn Creamery, Inc. v. Healy*, 512 U.S. 186, 193 n. 9, 114 S.Ct. 2205, 129 L.Ed.2d 157 (1994) (quoting 3 M. Farrand, Records of the Federal Convention of 1787, at 478 (1911)).

624, 98 S.Ct. 2531, 57 L.Ed.2d 475 (1978)). Second, the majority abjures the rule that “a state law that has the ‘practical effect’ of regulating commerce occurring wholly outside that State’s borders is invalid. . . .” *Healy v. Beer Inst.*, 491 U.S. 324, 332, 109 S.Ct. 2491, 105 L.Ed.2d 275 (1989).

Until recently, our circuit faithfully applied these doctrines, striking down parochial state laws that burdened interstate commerce. *See, e.g., Birth Hope Adoption Agency, Inc. v. Ariz. Health Care Cost Containment Sys.*, 218 F.3d 1040, 1044-45 (9th Cir.2000); *NCAA v. Miller*, 10 F.3d 633, 640 (9th Cir.1993); *BFI Med. Waste Sys. v. Whatcom Cnty.*, 983 F.2d 911, 913 (9th Cir.1993). The majority opinion represents a dramatic and unwarranted change of course.

III.

The majority’s most basic, and perhaps most consequential, error is its contention that California’s regulatory scheme does not facially discriminate against out-of-state commerce. The majority concludes, in essence, that the regulations are not discriminatory on their face because California has “some reason, apart from [its] origin, to treat [out-of-state ethanol] differently.” *Rocky Mountain Farmers Union*, 730 F.3d at 1089 (quoting *Philadelphia*, 437 U.S. at 627, 98 S.Ct. 2531, 98 S.Ct. 2531). As Judge Murguia observes in dissent, however, this reasoning “puts the cart before the horse,” and is therefore “inconsistent with Supreme Court precedent.” *Rocky Mountain Farmers Union*, 730 F.3d at 1108 (Murguia, J., concurring in part and dissenting in part).

Contrary to the majority’s analytical framework, “[d]etermining whether a regulation facially discriminates against interstate commerce begins and ends

with the regulation's plain language." *Id.* Under the dormant Commerce Clause, "discrimination' simply means differential treatment of in-state and out-of-state economic interests that benefits the former and burdens the latter." *Or. Waste Sys., Inc. v. Dep't of Env'tl. Quality*, 511 U.S. 93, 99, 114 S.Ct. 1345, 128 L.Ed.2d 13 (1994). "[T]he purpose of, or justification for, a law has no bearing on whether it is facially discriminatory." *Id.* at 100, 114 S.Ct. 1345 (citing *Chem. Waste Mgmt., Inc. v. Hunt*, 504 U.S. 334, 340-41, 112 S.Ct. 2009, 119 L.Ed.2d 121 (1992)).

Further, the language from *Philadelphia*, 437 U.S. at 627, 98 S.Ct. 2531, on which the majority relies has nothing to do with determining whether a regulation facially discriminates against interstate commerce. Rather, it merely shows that some discriminatory regulations may ultimately survive strict scrutiny. See *United Haulers Ass'n v. Oneida-Herkimer Solid Waste Mgmt. Auth.*, 550 U.S. 330, 366, 127 S.Ct. 1786, 167 L.Ed.2d 655 (2007) (Alito, J., dissenting) (citing quoted passage from *Philadelphia* as example of applying strict scrutiny). Thus, whether California has good reasons for penalizing Midwestern ethanol simply has nothing to do with whether the state's regulations are facially discriminatory.

It is clear that the challenged regulations discriminate against interstate commerce. Most blatantly, the Fuel Standard expressly assigns a higher carbon intensity to Midwestern ethanol, based in part on the greenhouse gas emissions arising from its transportation to California. Ethanol produced in-state faces no such penalty. As Judge Murguia notes, the regulatory scheme therefore "differentiates between in-state and out-of-state ethanol, according more preferential treatment to the former at the expense of the latter."

Rocky Mountain Farmers Union, 730 F.3d at 1108 (Murguia, J., concurring in part and dissenting in part). Because ethanol from Midwestern states faces a regulatory burden that chemically identical in-state ethanol does not, California’s regime is facially discriminatory. *See Or. Waste*, 511 U.S. at 99-100, 114 S.Ct. 1345. In concluding otherwise, the majority contravenes black letter law and renders our dormant Commerce Clause jurisprudence incoherent.

IV.

The majority compounds its error by concluding that legitimate local concerns support California’s regulation of the interstate ethanol market. Because the regulations are facially discriminatory, any justifications for them must “pass the ‘strictest scrutiny.’” *Id.* at 101, 114 S.Ct. 1345 (quoting *Hughes v. Oklahoma*, 441 U.S. 322, 337, 99 S.Ct. 1727, 60 L.Ed.2d 250 (1979)). To withstand this searching review, “the statute must serve a legitimate local purpose, and the purpose must be one that cannot be served as well by available nondiscriminatory means.” *Maine*, 477 U.S. at 140, 106 S.Ct. 2440. “This is an extremely difficult burden, ‘so heavy that facial discrimination by itself may be a fatal defect.’” *Camps Newfound*, 520 U.S. at 582, 117 S.Ct. 1590 (quoting *Or. Waste*, 511 U.S. at 101, 114 S.Ct. 1345).

California fails to carry its heavy burden. According to the majority, “[i]f [greenhouse gas] emissions continue to increase, California may see its coastline crumble under rising seas, its labor force imperiled by rising temperatures, and its farms devastated by severe droughts.” *Rocky Mountain Farmers Union*, 730 F.3d at 1097. When viewed against this backdrop, California’s regulatory justifications appear weighty indeed. But the majority overlooks a critical fact—

the Fuel Standard will not remedy the problem. To the contrary, CARB acknowledges that “[greenhouse gas] emission reductions by the [Fuel Standard] alone will not result in significant climate change.” In other words, California admits that its scheme will have little to no effect in averting the environmental catastrophe envisioned by the majority. This concession alone shows that the regulations fail strict scrutiny.⁴

And the defects in California’s ethanol regime go well beyond its ineffectiveness. While the regulations may not slow climate change, they will assuredly promote California’s energy industry at the expense of out-of-state competitors. CARB acknowledges that the Fuel Standard will “reduc[e] the volume of transportation fuels that are imported from other states. . . .” As such, CARB expects that the regulations will “keep[] more money in the State,” and that they “will provide needed employment, [and] an increased tax base for the State. . . .” In short, CARB admits that it purposefully “developed the [Fuel Standard] in a manner that minimizes costs and maximizes the total benefits to California.”

Of course, states may pass legislation that benefits local industry. But, “in all but the narrowest circumstances,” they may not do so at the expense of other states. *Granholm*, 544 U.S. at 472, 125 S.Ct. 1885. In concluding that California’s ethanol regulations are

⁴ As Judge Murguia observes in dissent, the ethanol regulations also fail strict scrutiny because California could endeavor to reduce greenhouse gas emissions through non-discriminatory means. California could, for instance, “treat[] ethanol produced in efficient plants more favorably than ethanol from inefficient plants. . . .” *Rocky Mountain Farmers Union*, 730 F.3d at 1109 (Murguia, J., concurring in part and dissenting in part).

facially neutral in spite of their overt and unjustified discrimination against interstate commerce, the majority departs from settled law and cuts this circuit's dormant Commerce Clause jurisprudence loose from its moorings.

V.

California's ethanol regulations suffer from another constitutional defect: they seek to control conduct in other states. The Supreme Court has clearly and consistently instructed that "a state law that has the 'practical effect' of regulating commerce occurring wholly outside that State's borders is invalid. . . ." *Healy*, 491 U.S. at 332, 109 S.Ct. 2491; *see also Baldwin*, 294 U.S. at 521-22, 55 S.Ct. 497. And the ethanol regulations plainly have extraterritorial reach, as they seek to influence out-of-state land use decisions and production methods. In concluding otherwise, the majority disregards controlling precedent and departs from the holdings of the Supreme Court and our sister circuits. More fundamentally, the majority approves a regime that threatens the very sort of "economic Balkanization that had plagued relations among the Colonies and later among the States under the Articles of Confederation." *Granholm*, 544 U.S. at 472, 125 S.Ct. 1885 (quoting *Hughes*, 441 U.S. at 325-26, 99 S.Ct. 1727).

The rule that one state "has no power to project its legislation into" another state, *Baldwin*, 294 U.S. at 521, 55 S.Ct. 497, is fundamental to our federal system. It embodies "the Constitution's special concern both with the maintenance of a national economic union unfettered by state-imposed limitations on interstate commerce and with the autonomy of the individual States within their respective spheres." *Healy*, 491 U.S. at 335-36, 109 S.Ct. 2491 (footnotes

omitted). Thus, “the ‘Commerce Clause . . . precludes the application of a state statute to commerce that takes place wholly outside of the State’s borders, whether or not the commerce has effects within the State. . . .” *Id.* at 336, 109 S.Ct. 2491 (quoting *Edgar v. MITE Corp.*, 457 U.S. 624, 642-43, 102 S.Ct. 2629, 73 L.Ed.2d 269 (1982) (plurality opinion)). California’s ethanol regulations fail this test.

It is no answer to assert, as the majority does, that the Fuel Standard merely provides “incentives” that might influence out-of-state conduct. *See Rocky Mountain Farmers Union*, 730 F.3d at 1103-04. By penalizing certain out-of-state practices, California’s regulations control out-of-state conduct just as surely as a mandate would, particularly in view of California’s economic clout. Thus, whether California’s scheme is characterized as providing “incentives” or establishing “mandates,” it has the practical effect of regulating interstate commerce. And, under the dormant Commerce Clause, “[t]he critical inquiry is whether the *practical effect* of the regulation is to control conduct beyond the boundaries of the State.” *Healy*, 491 U.S. at 336, 109 S.Ct. 2491 (citing *Brown-Forman Distillers Corp. v. N.Y. State Liquor Auth.*, 476 U.S. 573, 579, 106 S.Ct. 2080, 90 L.Ed.2d 552 (1986)) (emphasis added).⁵

Finally, the majority significantly underestimates the risk that California’s ethanol scheme will spur

⁵ Other courts of appeals have correctly held that Commerce Clause analysis turns on a law’s practical consequences, not on semantics. *See, e.g., Nat’l Foreign Trade Council v. Natsios*, 181 F.3d 38, 69 (1st Cir.1999), *aff’d sub nom. Crosby v. Nat’l Foreign Trade Council*, 530 U.S. 363, 120 S.Ct. 2288, 147 L.Ed.2d 352 (2000); *Nat’l Solid Wastes Mgmt. Ass’n v. Meyer*, 63 F.3d 652, 661-62 (7th Cir.1995).

other states to enact “the kind of competing and interlocking local economic regulation that the Commerce Clause was meant to preclude.” *Healy*, 491 U.S. at 337, 109 S.Ct. 2491. For example, now that the panel majority has blessed California’s experiment in extraterritorial regulation, Oregon may move forward with its own Clean Fuels Program. The majority assures us that the Oregon program and those of other states will merely “complement[]” California’s, *Rocky Mountain Farmers Union*, 730 F.3d at 1104, but there is no guarantee that this is so.⁶ In any event, ethanol producers will soon face the daunting prospect of navigating several interlocking, if not entirely contradictory, regulatory regimes. Fragmentation of the national economy may ensue.

Two brief examples illustrate the point. If California may, consistent with the dormant Commerce Clause, seek to influence out-of-state ethanol production, it may just as legitimately seek to influence any out-of-state conduct with perceived local effects. Under the majority’s reasoning, California could impose regulatory penalties (or grant “incentives”) to require manufacturers in Texas to pay higher wages to their employees if they intend to sell their products in California. Such a measure would, of course, benefit

⁶ California recently pledged to align its energy policies with Oregon, Washington, and British Columbia. Michael Wines, *Climate Pact Is Signed by 3 States and Partner*, N.Y. Times, Oct. 30, 2013, at A18. If, as the majority holds, the Constitution poses no obstacle to California’s regulation of interstate commerce, there is little reason to doubt that California may regulate foreign commerce as well. Unsurprisingly, this conclusion puts us squarely at odds with our sister circuits. See *Natsios*, 181 F.3d at 69. Further, the grouping of states in this fashion represents the type of “economic Balkanization” that the Commerce Clause was intended to prevent. *Hughes*, 441 U.S. at 325, 99 S.Ct. 1727.

California to the extent that it would minimize the risk of competition from Texas businesses, with their lower labor costs. But under the same logic, Texas could—and assuredly would—respond in kind, perhaps by penalizing California agriculture on account of its reliance on costly irrigation methods.

Similarly, California could—under the majority’s reasoning—penalize out-of-state wineries to account for the environmental effects of transporting their wines to California. Like the Fuel Standard, such a regulation would promote California businesses at the expense of out-of-state interests. And, also like the Fuel Standard, such a regulation could lead to destructive interstate retaliation.⁷

The very purpose of the dormant Commerce Clause is to ensure that “[r]ivalries among the States are . . . kept to a minimum, and a proliferation of trade zones is prevented.” *Granholtz*, 544 U.S. at 472, 125 S.Ct. 1885 (citing *C & A Carbone, Inc. v. Town of Clarkstown*, N.Y., 511 U.S. 383, 390, 114 S.Ct. 1677, 128 L.Ed.2d 399 (1994)). Until the majority’s ruling, the dormant Commerce Clause guarded against such economic fragmentation. See *Baldwin*, 294 U.S. at 524, 55 S.Ct. 497 (explaining that a state may not “condition importation upon proof of a satisfactory wage scale in factory or shop”). Now, the dormant

⁷ In his concurrence in the denial of rehearing en banc, Judge Gould relies on *Pharmaceutical Research & Manufacturers of America v. Walsh*, 538 U.S. 644, 669, 123 S.Ct. 1855, 155 L.Ed.2d 889 (2003), for the proposition that California may legitimately regulate in-state commerce with the goal of influencing out-of-state conduct. But nothing in *Walsh* repudiates the principle that a state may not close its borders to out-of-state goods unless exporters alter their out-of-state conduct. See *Baldwin*, 294 U.S. at 524, 55 S.Ct. 497.

Commerce Clause has been rendered toothless in our circuit, and we stand in open defiance of controlling Supreme Court precedent.

VI.

The majority opinion in this case upholds a regulatory scheme that, on its face, promotes California industry at the expense of out-of-state interests. The majority opinion also sanctions California's clear attempt to project its authority into other states. Because the Constitution forbids such an expansive and discriminatory exercise of state power over interstate commerce, I respectfully dissent from our failure to rehear this case en banc.

APPENDIX H

STATE REGULATION

Final Regulation Order

Adopt new sections 95480, 95480.1, 95481, 95482, 95483, 95484, 95485, 95486, 95487, 95488, 95489, and 95490, title 17, California Code of Regulations (CCR), to read as follows:

(Note: The entire text of Subarticle 7 and sections 95480, 95480.1, 95481, 95482, 95483, 95484, 95485, 95486, 95487, 95488, 95489, and 95490 is new language. Subsection headings are shown in *italics* and are to be italicized in Barclays California Code of Regulations.)

Subchapter 10. Climate Change

Article 4. Regulations to Achieve Greenhouse
Gas Emission Reductions

Subarticle 7. Low Carbon Fuel Standard

Section 95480. Purpose

The purpose of this regulation is to implement a low carbon fuel standard, which will reduce greenhouse gas emissions by reducing the full fuel-cycle, carbon intensity of the transportation fuel pool used in California, pursuant to the California Global Warming Solutions Act of 2006 (Health & Safety Code (H&S), section 38500 et.seq.).

* * * *

Section 95480.1. Applicability

(a) *Applicability of the Low Carbon Fuel Standard.*

Except as provided in this section, the California Low Carbon Fuel Standard regulation, title 17, California Code of Regulations (CCR),

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sections 95480 through 95490 (collectively referred to as the “LCFS”) applies to any transportation fuel, as defined in section 95481, that is sold, supplied, or offered for sale in California, and to any person who, as a regulated party defined in section 95481 and specified in section 95484(a), is responsible for a transportation fuel in a calendar year. The types of transportation fuels to which the LCFS applies include:

- (1) California reformulated gasoline (“gasoline” or “CaRFG”);
- (2) California diesel fuel (“diesel fuel” or “ULSD”);
- (3) Fossil compressed natural gas (“Fossil CNG”) or fossil liquefied natural gas (“Fossil LNG”);
- (4) Biogas CNG or biogas LNG;
- (5) Electricity;
- (6) Compressed or liquefied hydrogen (“hydrogen”);
- (7) A fuel blend containing hydrogen (“hydrogen blend”);
- (8) A fuel blend containing greater than 10 percent ethanol by volume;
- (9) A fuel blend containing biomass-based diesel;
- (10) Denatured fuel ethanol (“E100”);
- (11) Neat biomass-based diesel (“B100”); and
- (12) Any other liquid or non-liquid fuel.

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The provisions and requirements in section 95484(c), (d) and (e) apply starting January 1, 2010. All other provisions and requirements of the LCFS regulation apply starting January 1, 2011.

- (b) *Credit Generation Opt-In Provision for Specific Alternative Fuels.* Each of the following alternative fuels is presumed to have a full fuel-cycle, carbon intensity that meets the compliance schedules set forth in section 95482(b) and (c) through December 31, 2020. With regard to an alternative fuel listed below, the regulated party for the fuel must meet the requirements of the LCFS regulation only if the regulated party elects to generate LCFS credits:
- (1) Electricity;
 - (2) Hydrogen;
 - (3) A hydrogen blend;
 - (4) Fossil CNG derived from North American sources;
 - (5) Biogas CNG; and
 - (6) Biogas LNG.

* * * *

Section 95481. Definitions and Acronyms

- (a) *Definitions.* For the purposes of sections 95480 through 95489, the definitions in Health and Safety Code sections 39010 through 39060 shall apply, except as otherwise specified in this section, section 95480.1, or sections 95482 through 95489:

* * * *

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- (11) “Carbon intensity” means the amount of lifecycle greenhouse gas emissions, per unit of energy of fuel delivered, expressed in grams of carbon dioxide equivalent per megajoule (gCO₂E/MJ).

* * * *

- (13) “Credits” and “deficits” means the measures used for determining a regulated party’s compliance with the average carbon intensity requirements in sections 95482 and 95483. Credits and deficits are denominated in units of metric tons of carbon dioxide equivalent (CO₂E), and are calculated pursuant to section 95485(a).

* * * *

- (28) “Lifecycle greenhouse gas emissions” means 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.

* * * *

Section 95482. Average Carbon Intensity Requirements for Gasoline and Diesel

- (a) Starting January 1, 2011 and for each year thereafter, a regulated party must meet the average carbon intensity requirements set forth in Table 1 and Table 2 of this section for its transportation gasoline and diesel fuel, respectively, in each calendar year. For 2010 only, a regulated party does not need to meet a carbon intensity requirement, but it must meet the reporting requirements set forth in section 95484(c),
- (b) *Requirements for gasoline and fuels used as a substitute for gasoline.*

Table 1. LCFS Compliance Schedule for 2011 to 2020 for Gasoline and Fuels Used as a Substitute for Gasoline.

Year	Average Carbon Intensity (gCo2E/MJ)	% Reduction
2010	Reporting Only	
2011	95.61	0.25%
2012	95.37	0.5%
2013	94.89	1.0%
2014	94.41	1.5%
2015	93.45	2.5%
2016	92.50	3.5%
2017	91.06	5.0%
2018	89.62	6.5%
2019	88.18	8.0%
2020 and subsequent years	86.27	10.0%

(c) *Requirements for diesel fuel and fuels used as a substitute for diesel fuel.*

Table 2. LCFS Compliance Schedule for 2011 to 2020 for Diesel Fuel and Fuels Used as a Substitute for Diesel Fuel.

Year	Average Carbon Intensity (gCo2E/MJ)	% Reduction
2010	Reporting Only	
2011	94.47	.25%
2012	94.24	.05%
2013	93.76	1.0%
2014	93.29	1.5%
2015	92.34	2.5%
2016	91.40	3.5%
2017	89.97	5.0%
2018	88.55	6.5%
2019	87.13	8.0%
2020 and subsequent years	85.24	10.0%

Section 95484. Requirements for Regulated Parties

* * * *

(b) Calculation of Credit Balance.

* * * *

(4) Deficit Reconciliation.

- (A) A regulated party that meets the conditions of deficit carryover, as specified in section 95481(b)(3), must eliminate any deficit generated in a given compliance period by the end of

the next compliance period. A deficit may be eliminated only by retirement of an equal amount of retained credits (*Credits^{CarriedOver}*), by purchase of an equal amount of credits from another regulated party, or by any combination of these two methods.

- (B) If the conditions of deficit carryover as specified in section 95481(b)(3) are not met, a regulated party must eliminate any deficit generated in a given compliance period by the end of the next compliance period. A deficit may be eliminated only by retirement of an equal amount of retained credits (*Credits^{CarriedOver}*), by purchase of an equal amount of credits from another regulated party, or by any combination of these two methods. In addition, the regulated party is subject to penalties to the extent permitted under State law.
- (C) A regulated party that is reconciling in the current compliance period a deficit from the previous compliance period under (A) or (B) above remains responsible for meeting the LCFS regulation requirements during the current compliance period.

* * * *

(e) *Violations and Penalties.*

* * * *

- (2) Pursuant to H&S section 38580, any violation of the provisions of the LCFS regulation shall be deemed to result in an emission of an air contaminant for the purposes of the penalty provisions of Article 3 (commencing with § 42400) of Chapter 4 of Part 4 of, and Chapter 1.5 (commencing with § 43025) of Part 5 of, Division 26.

* * * *

Section 95485. LCFS Credits and Deficits

- (a) *Calculation of Credits and Deficits Generated.*

A regulated party must calculate the amount of credits and deficits generated in a compliance period for an LCFS fuel using the methods specified below in section 95485(a)(1) through (3). The total credits and deficits generated are used in determining the overall credit balance for a compliance period, pursuant to section 95484(b). All credits and deficits are denominated in units of metric tons (MT) of carbon dioxide equivalent.

- (1) All LCFS fuel quantities used for credit calculation must be in energy units of megajoules (MJ).

Fuel quantities denominated in other units, such as those shown in Table 4, must be converted to MJ by multiplying by the corresponding energy density¹:

¹ Energy density factors are based on the lower heating values of fuels in CA-GREET using BTU to MJ conversion of 1055 J/Btu.

Table 4. Energy Densities of LCFS Fuels and Blendstocks.

Fuel (units)	Energy Density
CARBOB (gal)	119.53 (MJ/gal)
CaRFG (gal)	115.63 (MJ/gal)
Diesel fuel (gal)	134.47 (MJ/gal)
CNG (scf)	0.98 (MJ/scf)
LNG (gal)	78.83 (MJ/gal)
Electricity (KWh)	3.60 (MJ/KWh)
Hydrogen (kg)	120.00 (MJ/kg)
Anhydrous Ethanol (gal)	80.53 (MJ/gal)
Neat Biomass-based diesel (gal)	126.13 (MJ/gal)

- (2) The total credits and deficits generated by a regulated party in a compliance period must be calculated as follows:

$$Credits^{Gen}(MT) = \sum_i^n Credits_i^{gasoline} + \sum_i^n Credits_i^{diesel}$$

$$Deficits^{Gen}(MT) = \sum_i^n Deficits_i^{gasoline} + \sum_i^n Deficits_i^{diesel}$$

where:

$Credits^{Gen}$ represents the total credits (a zero or positive value), in units of metric tons ("MT"), for all fuels and blendstocks determined from the credits generated under either or both of the gasoline and diesel fuel average carbon intensity requirements;

$Deficits^{Gen}$ represents the total deficits (a negative value), in units of metric tons ("MT"), for all fuels and blendstocks determined from the deficits generated under

either or both of the gasoline and diesel fuel average carbon intensity requirements;

i is the finished fuel or blendstock index; and

n is the total number of finished fuels and blendstocks provided by a regulated party in a compliance period.

- (3) LCFS credits or deficits for each fuel or blendstock supplied by a regulated party must be calculated according to the following equations:

(A)

$$Credits_i^{XD} / Deficits_i^{XD} (MT) = (CI_{standard}^{XD} - CI_{reported}^{XD}) \times E_{displaced}^{XD} \times C$$

where:

$Credits_i^{XD} / Deficits_i^{XD} (MT)$ is either the amount of LCFS credits generated (a zero or positive value), or deficits incurred (a negative value), in metric tons, by a fuel or blendstock under the average carbon intensity requirement for gasoline (XD="gasoline") or diesel (XD="diesel");

$CI_{Standard}^{XD}$ is the average carbon intensity requirement of either gasoline (XD= "gasoline") or diesel fuel (XD= "diesel") for a given year as provided in section 95482 (b) and (c), respectively;

$CI_{reported}^{XD}$ is the adjusted carbon intensity value of a fuel or blendstock, in gCO₂E/MJ, calculated pursuant to section 95485(a)(3)(B);

$E_{displaced}^{XD}$ is the total amount of gasoline (XD="gasoline") or diesel (XD="diesel") fuel energy displaced, in MJ, by the use of an

alternative fuel, calculated pursuant to section 95485(a)(3)(C); and

C is a factor used to convert credits to units of metric tons from gCO₂E and has the value of:

$$C = 1.0 \times 10^{-6} \frac{(MT)}{(gCO_2E)}$$

(B) $CI_{reported}^{XD} = CI_i / EER^{XD}$

where:

CI_i is the carbon intensity of the fuel or blendstock, measured in gCO₂E/MJ, determined by a California-modified GREET pathway or a custom pathway and incorporates a land use modifier (if applicable); and

EER^{XD} is the dimensionless Energy Economy Ratio (EER) relative to gasoline (XD=“gasoline”) or diesel fuel (XD= “diesel”) as listed in Table 5. For a vehicle-fuel combination not listed in Table 5, $EER^{XD}=1$ must be used.

(C) $E_{displaced}^{XD} = E_i \times EER^{XD}$

where:

E_i is the energy of the fuel or blendstock, in MJ, determined from the energy density conversion factors in Table 4.

**Table 5. EER. Values for Fuels Used In
Light- and Medium-Duty, and
Heavy-Duty Applications.**

Light/ Medium-duty Applications (Fuels used as gasoline replacement)		Heavy-Duty/ Of-Road Applications (Fuels used as diesel replacement)	
Fuel/ Vehicle Combination	EER Values Relative to Gasoline	Fuel/ Vehicles Combination	EER Values Relative to Diesel
Gasoline (Incl. E6 and E10) or E85 (and other ethanol blends)	1.0	Diesel fuel or Biomass-based diesel blends	1.0
CNG/ ICEV	1.0	CG or LNG	0.9
Electricity/ BEV, or PHEV	3.0	Electricity/ BEV, or PHEV	2.7
H2/ FCV	2.3	H2/ FCV	1.9

(BEV = battery electric vehicle, PHEV= plug-in hybrid electric vehicle, FCV = fuel cell vehicle, ICEV= internal combustion engine vehicle)

- (b) *Credit Generation Frequency.* Beginning 2011 and every year afterwards, a regulated party may generate credits quarterly.
- (c) *Credit Acquisition, Banking, Borrowing, and Trading.*
 - (1) A regulated party may:

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- (A) retain LCFS credits without expiration for use within the LCFS market;
 - (B) acquire or transfer LCFS credits. A third-party entity, which is not a regulated party or acting on behalf of a regulated party, may not purchase, sell, or trade LCFS credits, except as otherwise specified in (C) below; and
 - (C) export credits for compliance with other greenhouse gas reduction initiatives including, but not limited to, programs established pursuant to AB 32 (Nunez, Stats. 2006, ch. 488), subject to the authorities and requirements of those programs.
- (2) A regulated party may not:
- (A) use credits in the LCFS program that are generated outside the LCFS program, including, but not limited to, credits generated in other AB 32 programs.
 - (B) borrow or use credits from anticipated future carbon intensity reductions.
 - (C) generate LCFS credits from fuels exempted from the LCFS under section 95480.1(d) or are otherwise not one of the transportation fuels specified in section 95480.1(a).
- (d) *Nature of Credits.* LCFS credits shall not constitute instruments, securities, or any other form of property.

Section 95486. Determination of Carbon intensity Values*(a) Selection of Method.*

- (1) A regulated party for CARBOB, gasoline, or diesel fuel must use Method 1, as set forth in section 95486(b)(2)(A), to determine the carbon intensity of each fuel or blendstock for which it is responsible (“regulated party’s fuel”).
- (2) A regulated party for any other fuel or blendstock must use Method 1, as set forth in section 95486(b)(2)(B), to determine the carbon intensity of each fuel for the regulated party’s fuels, unless the regulated party is approved for using either Method 2A or Method 2B, as provided in section 95486(c) or (d).
- (3) A regulated party’s choice of carbon intensity value under Method 1 in either (a)(1) or (a)(2) above is subject in all cases to Executive Officer approval, as specified in this provision. If the Executive Officer has reason to believe that the regulated party’s choice is not the value that most closely corresponds to its fuel or blendstock, the Executive Officer shall choose a carbon intensity value, in the Carbon Intensity Lookup Tables for the fuel or blendstock, which the Executive Officer determines is the one that most closely corresponds to the pathway for that fuel or blendstock. The Executive Officer shall provide the rationale for his/her determination to the regulated party in writing within 10

business days of the determination. The regulated party shall be responsible for reconciling any deficits, in accordance with section 95485, that were incurred as a result of its initial choice of carbon intensity values. In determining whether a carbon intensity value that is different than the one chosen by the regulated party is more appropriate, the Executive Officer may consider any information submitted by the regulated party in support of its choice of carbon intensity value.

(b) *Method 1- ARB Lookup Table.*

- (1) To generate carbon intensity values, ARB uses the California-modified GREET (CA-GREET) model (version 1.8b, February 2009, updated December 2009)), which is incorporated herein by reference, and a land-use change (LUC) modifier (when applicable). The CA-GREET model is available for downloading on ARB's website at <http://www.arb.ca.gov/fuels/lcfs/lcfs.htm>.

The Carbon-Intensity Lookup Tables, shown below, specify the carbon intensity values for the enumerated fuel pathways that are described in the following supporting documents, all of which are incorporated herein by reference:

- (A) Stationary Source Division, Air Resources Board (February 27, 2009, v.2.1), "Detailed California-Modified GREET Pathway for California Refor-

mulated Gasoline Blendstock for Oxygenate Blending (CARBOB) from Average Crude Refined in California;”

- (B) Stationary Source Division, Air Resources Board (February 27, 2009, v.2.1), “Detailed California-Modified GREET Pathway for California Reformulated Gasoline” (CaRFG);”
- (C) Stationary Source Division, Air Resources Board (February 28, 2009, v.2.1), “Detailed California-Modified GREET Pathway for Ultra Low Sulfur Diesel (ULSD) from Average Crude Refined in California;”
- (D) Stationary Source Division, Air Resources Board (February 27, 2009, v.2.1), “Detailed California-Modified GREET Pathway for Corn Ethanol;”
- (E) Stationary Source Division, Air Resources Board (February 27, 2009, v.2.1), “Detailed California-Modified GREET Pathway for Brazilian Sugarcane Ethanol;”
- (F) Stationary Source Division, Air Resources Board (February 28, 2009, v.2.1), “Detailed California-Modified GREET Pathway for Compressed Natural Gas (CNG) from North American Natural Gas;”
- (G) Stationary Source Division, Air Resources Board (February 28, 2009, v.2.1), “Detailed California-Modified

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GREET Pathway for Compressed Natural Gas (CNG) from Landfill Gas;”

- (H) Stationary Source Division, Air Resources Board (February 27, 2009, v.2.1), “Detailed California-Modified GREET Pathway for California Average and Marginal Electricity;”
- (I) Stationary Source Division, Air Resources Board (February 27, 2009, v.2.1), “Detailed California-Modified GREET Pathway for Compressed Gaseous Hydrogen from North American Natural Gas;”
- (J) Stationary Source Division, Air Resources Board (September 23, 2009, v.2.0), “Detailed California-Modified GREET Pathways for Liquefied Natural Gas (LNG) from North American and Remote Natural Gas Sources;”
- (K) Stationary Source Division, Air Resources Board (September 23, 2009, v.2.0), “Detailed California-Modified GREET Pathway for Liquefied Natural Gas (LNG) from Landfill Gas (LFG);”
- (L) Stationary Source Division, Air Resources Board (July 20, 2009, v.1.0), “Detailed California-Modified GREET Pathway for Compressed Natural Gas (CNG) from Dairy Digester Biogas;”
- (M) Stationary Source Division, Air Resources Board (September 23, 2009, v.2.0), “Detailed California-Modified

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GREET Pathway for Liquefied Natural Gas (LNG) from Dairy Digester Biogas;”

- (N) Stationary Source Division, Air Resources Board (September 23, 2009, v.2.0), “Detailed California-Modified GREET Pathway for Biodiesel from Used Cooking Oil;”
- (O) Stationary Source Division, Air Resources Board (September 23, 2009, v.2.0), “Detailed California-Modified GREET Pathway for Co-Processed Renewable Diesel from Tallow (U.S. Sourced);”
- (P) Stationary Source Division, Air Resources Board (September 23, 2009, v.2.3), “Detailed California-Modified GREET Pathways for Brazilian Sugar-cane Ethanol: Average Brazilian Ethanol, With Mechanized Harvesting and Electricity Co-product Credit, With Electricity Co-product Credit;”
- (Q) Stationary Source Division, Air Resources Board (December 14, 2009, v.3.0), “Detailed California-Modified GREET Pathway for Biodiesel from Midwest Soybeans; and
- (R) Stationary Source Division, Air Resources Board (December 14, 2009, v.3.0), “Detailed California-Modified GREET Pathway for Renewable Diesel from Midwest Soybeans.”

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

Fuel	Pathway Description	Carbon Intensity Values (gCO₂e/MJ)		
		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
Ethanol from Corn	Midwest average; 80% Dry Mill; 20% Wet Mill; Dry DGS	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

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	Midwest; Dry Mill; Dry DGS; NG	68.40	30	98.40
	Midwest; Wet Mill, 60% NG, 40% coal	75.10	30	105.10
	Midwest; Wet Mill, 100% NG	64.52	30	94.52
	Midwest; Wet Mill, 100% coal	90.99	30	120.99
	Midwest; Dry Mill; Wet DGS	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

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	California; Dry Mill; Wet DGS; 80% NG; 20% Biomass	47.44	30	77.44
Ethanol from Sugarcane	Brazilian sugarcane using average production processes	27.40	46	73.40
	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
Compressed Natural Gas	California NG via pipeline; compressed in CA	67.70	0	67.70

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	North American NG delivered via pipeline; compressed in CA	68.00	0	68.00
	Landfill gas (bio-methane) cleaned up to pipeline quality NG; compressed in CA	11.26	0	11.26
	Dairy Digester Blogas to CNG	13.45	0	13.45
Liquefied Natural Gas	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

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	Overseas-sourced LNG delivered as LNG to Baja; re-gasified then re-liquefied in CA using liquefaction with 90% efficiency	93.37	0	93.37
	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
	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

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	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
Electricity	California average electricity mix	124.10	0	124.10
	California marginal electricity mix of natural gas and renewable energy sources	104.71	0	104.71

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	Compressed H ₂ from central reforming of NG (includes liquefaction and re-gasification steps)	142.20	0	142.20
Hydrogen	Liquid H ₂ from central reforming of NG	133.00	0	133.00
	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

Table 7. Carbon Intensify Lookup Table for Diesel and Fuels that Substitute for Diesel.

Fuel	Pathway Description	Carbon Intensity Values (gCO₂e/MJ)		
		Direct Emissions	Land Use or Other Indirect Effect	Total
Diesel	ULSD – based on the average crude oil delivered to California refineries and average California refinery efficiencies	94.71	0	94.71
Biodiesel	Conversion of waste oils (Used Cooking Oil) to biodiesel (fatty acid methyl esters – FAME) where “cooking” is required	15.84	0	15.84
	Conversion of waste oils (Used Cooking Oil) to biodiesel (fatty acid methyl	11.76	0	11.76

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	esters – FAME) where “cooking” is not required			
	Conversion of Midwest soybeans to biodiesel (fatty acid methyl esters – FAME)	21.25	62	83.25
Renewable Diesel	Conversion of tallow to renewable diesel using higher energy use for rendering	39.33	0	39.33
	Conversion of tallow to renewable diesel using tower energy use for rendering	19.65	0	19.65
	Conversion of Midwest soybeans to renewable diesel	20.16	62	82.16
Compressed Natural Gas	California NG via pipeline; compressed in CA	67.70	0	67.70

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	North American NG delivered via pipeline; compressed in CA	68.00	0	68.00
	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
Liquefied Natural Gas	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

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	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
	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
	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

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	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
Electricity	California average electricity mix	124.10	0	124.10
	California marginal electricity mix of natural gas and renewable energy sources	104.71	0	104.71

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Hydrogen	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
	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

(2) *Use of Lookup-Table Carbon-Intensity Values.*

(A) *For CARBOB, Gasoline and Diesel Fuel.*

For purposes of this section 95486(b)(2)(A), “2006 California baseline crude mix” means the total pool of crude oil supplied to California refiners in 2006; “included in the 2006 California baseline crude mix” means the crude oil constituted at least 2.0% of the 2006 California baseline crude mix, by volume, as shown by California Energy Commission records for 2006; and “high carbon-intensity crude oil” means any crude oil that has a total production and transport carbon-intensity value greater than 15.00 grams CO₂e/MJ.

The carbon Intensity for a regulated party’s CARBOB, gasoline or a diesel fuel is determined as specified in section 95486(b)(2)(A)1. or 2. below, whichever applies:

1. *For CARBOB, Gasoline or Diesel Fuel Derived from Crude Oil That Is Either Included in the 2006 California Baseline Crude Mix or Is Not a High Carbon Intensity Crude Oil.*

If all of a regulated party’s CARBOB, gasoline or diesel fuel is derived from crude oil that is either:

- a. included in the 2006 California baseline crude mix, or

- b. not a high carbon-intensity crude oil, the regulated party must use the average carbon intensity value shown in the Carbon Intensity Lookup Table for CARBOB, gasoline or diesel fuel.
2. *For All Other CARBOB, Gasoline or Diesel Fuel, Including Those Derived from High Carbon-Intensity Crude Oil (HCICO).*

Except as set forth in this provision, if any portion of a regulated party's CARBOB, gasoline, or diesel fuel does not fall within section 95486(b)(2)(A)1. above (including those derived from high carbon-intensity crude oil), the regulated party must calculate the deficits for CARBOB, gasoline, or diesel fuel, derived wholly or in part from crude oil subject to this provision, using the deficit calculation methodology and the process for determining the carbon intensity value described in paragraphs a. and b., respectively, below:

- a. *Deficit Calculation When HCICO Is Used.*
 - i. *Calculation Methodology.* For purposes of this section, a regulated party for CARBOB, gasoline or diesel fuel, derived wholly or in part from HCICO feedstock, must calculate separately the base deficit and incremental deficit for each fuel or blendstock, as specified in this provision. The base deficit must be

calculated for the entire volume of fuel or blendstock derived from the mix of HCICO and all other crude, and the incremental deficit must be calculated only for the volume of fuel or blendstock derived from the HCICO, as follows:

$$Deficits_{Base}^{XD} (MT) = (CI_{Standard}^{XD} - CI_{Avg}^{XD}) \times E_{Total}^{XD} \times C$$

and

$$Deficits_{Incremental}^{XD} (MT) = (CI_{Avg}^{XD} - CI_{HCICO}^{XD}) \times E_{HCICO}^{XD} \times C$$

where,

I is the finished fuel or blendstock index;

$Deficits_{Base}^{XD} (MT)$ means the amount of LCFS

deficits incurred (a negative value), in metric tons, by the volume of gasoline, CARBOB, or diesel fuel that is derived from all petroleum feedstock, including HCICO, produced in or imported into California during a specific calendar year;

$Deficits_{Incremental}^{XD} (MT)$ means the amount of LCFS deficits incurred (a negative value), in metric tons, by the volume of a fuel or blendstock that is derived wholly from HCICO feedstock produced in or imported into California during a specific calendar year

$CI_{Standard}^{XD}$ has the same meaning as specified in section 95485(a)(3)(A);

CI_{Avg}^{XD} is the adjusted average carbon-intensity value of a fuel or blendstock, in gCO₂E/MJ, derived from all petroleum feedstock, including

HCICO, produced in or imported into California during a specific calendar year, where the carbon intensity of the fuel or blendstock is adjusted by dividing it with the EER as described in section 95485(a)(3)(B). For purposes of this provision, CI_{Avg}^{XD} for CARBOB (XD=“gasoline”) and diesel fuel (XD = “diesel”) is the total carbon intensity value for CARBOB and diesel (ULSD) set forth In the Carbon Intensity Lookup Table, respectively;

CI_{HCICO}^{XD} is the adjusted actual carbon-intensity value of a fuel or blendstock, in gCO₂E/MJ, derived from HCICO feedstock produced in or imported into California during a specific calendar year, where the carbon intensity of the fuel or blendstock, as determined pursuant to paragraph ii. below, is adjusted by dividing it with the EER as described in section 95485(a)(3)(B);

CI_{Total}^{XD} is the adjusted total amount of fuel energy, in MJ, from gasoline (XD=“gasoline”) or diesel (XD=“diesel”), derived from all petroleum feedstock produced in or imported into California during a specific calendar year, where the total amount of fuel energy of the fuel is adjusted by multiplying it with the EER as described in section 95485(a)(3)(C). Where the petroleum feedstock is comprised entirely of HCICO, E_{Total}^{XD} equals E_{HCICO}^{XD} ;

E_{HCICO}^{XD} is the adjusted total amount of fuel energy, in MJ, from gasoline (XD=“gasoline”) or diesel (XD=“diesel”), derived from HCICO feedstock produced in or imported into California during a specific calendar year, where the total amount of fuel energy of the fuel is

adjusted by multiplying it with the EER as described in section 95485(a)(3)(C); and

C has the same meaning as specified in section 95485(a)(3)(A).

ii. *Determination of Carbon Intensity Value for HCICO-derived Products, CI_{HCICO}^{XD}*

A regulated party subject to section 95486(b)(2)(A) must determine the carbon intensity value for Its CARBOB, gasoline or diesel fuel using any of the following that applies, subject to Executive Officer approval as specified in section 95485(a)(2) or as otherwise specified.

- I. The carbon intensity value shown in the Carbon Intensity Lookup Table corresponding to the HCICO's pathway; or
- II. Except as provided in paragraph III. below, if there is no carbon intensity value shown in the Carbon Intensity Lookup Table corresponding to the HCICO's pathway, the regulated party must propose a new path-way for its HCICO and obtain approval from the Executive Officer for the resulting pathway's carbon intensity pursuant to Method 2B as set forth in section 95486(d) and (f); or
- III. The regulated party may, upon written Executive Officer approval pursuant to section 95486(f), use the average carbon intensity value in the Carbon Intensity Lookup Table for CARBOB, gasoline or diesel fuel, provided the GHG emissions from the fuel's crude production and

transport steps are subject to control measures, such as carbon capture-and-sequestration (CCS) or other methods, which reduce the crude oil's production and transport carbon-intensity value to 15.00 grams CO₂e/MJ or less, as determined by the Executive Officer.

(B) *For All Other Fuels and Blendstocks.*

Except as provided in section 95486(c) and (d), for each of a regulated party's fuels, the regulated party must use the carbon intensity value in Lookup Table that most closely corresponds to the production process used to produce the regulated party's fuel. The Lookup Table carbon intensity value selected by the regulated party is subject to approval by the Executive Officer.

[Note: For example, if one of the regulated party's fuels is compressed natural gas (CNG) used in a light-duty vehicle, and the CNG is derived from dairy digester biogas, the regulated party would use the total carbon intensity value in Carbon Intensity Lookup Table 6 (i.e., the last column in Lookup Table 6) corresponding to the applicable Fuel (compressed natural gas) and Pathway Description (Dairy Digester Biogas to CNG). The result in this example would be a total carbon intensity value of 13.45 gCO₂e/MJ.]

(c) *Method 2A-Customized Lookup Table Values (Modified Method 1).*

Under Method 2A, the regulated party may propose, for the Executive Officer's written

approval pursuant to section 95486(f), modifications to one or more inputs to the CA-GREET model used to generate the carbon intensity values in the Method 1 Lookup Table.

For any of its transportation fuels subject to the LCFS regulation, a regulated party may propose the use of Method 2A to determine the fuel's carbon Intensity, as provided in this section 95486(c). For each fuel subject to a proposed Method 2A, the regulated party must obtain written approval from the Executive Officer for its proposed Method 2A before the regulated party may use Method 2A for determining the carbon intensity of the fuel. The Executive Officer's written approval may include more than one of a regulated party's fuels under Method 2A.

The Executive Officer may not approve a proposed Method 2A unless the regulated party and its proposed Method 2A meet the scientific defensibility, "5-10" substantiality, and data submittal requirements specified in section 95486(e)(1) through (3) and the following requirements:

- (1) The proposed modified CA-GREET inputs must accurately reflect the conditions specific to the regulated party's production and distribution process;
- (2) The proposed Method 2A uses only the inputs that are already incorporated in CA-GREET and does not add any new inputs (e.g., refinery efficiency); and
- (3) The regulated party must request the Executive Officer to conduct an analysis or

modeling to determine the new pathway's impact on total carbon intensity due to indirect effects, including land-use, changes, as the Executive Officer deems appropriate. The Executive Officer will use the GTAP Model (February 2009), which is incorporated by reference, or other model determined by the Executive Officer to be at least equivalent to the GTAP Model (February 2009).

- (d) *Method 2B – New Pathway Generated by California-Modified GREET (v.1.8b)*. Under Method 2B, the regulated party proposes for the Executive Officer's written approval the generation of a new pathway using the CA-GREET as provided for in this provision. The Executive Officer's approval is subject to the requirements as specified in section 95486(f) and the following requirements:
- (1) For purposes of this provision, "new pathway" means the proposed full fuel-cycle (well-to-wheel) pathway is not already in the ARB Lookup Table specified in section 95486(b)(1), as determined by the Executive Officer;
 - (2) The regulated party must demonstrate to the Executive Officer's satisfaction that the CA-GREET can be modified successfully to generate the proposed new pathway. If the Executive Officer determines that the CA-GREET model cannot successfully generate the proposed new pathway, the proponent-regulated party must use either Method 1 or Method 2A to determine its fuel's carbon intensity;

- (3) The regulated party must identify all modified parameters for use in the CA-GREET for generating the new pathway;
 - (4) The CA-GREET inputs used to generate the new pathway must accurately reflect the conditions specific to the regulated party's production and marketing process; and
 - (5) The regulated party must request the Executive Officer to conduct an analysis or modeling to determine the new pathway's impact on total carbon intensity due to indirect effects, including land-use changes, as the Executive Officer deems appropriate. The Executive Officer will use the GTAP Model (February 2009), which is incorporated by reference, or other model determined by the Executive Officer to be at least equivalent to the GTAP Model (February 2009).
- (e) *Scientific Defensibility, Burden of Proof, Substantiality, and Data Submittal Requirements and Procedure for Approval of Method 2A or 2B.* For a proposed Method 2A or 2B to be approved by the Executive Officer, the regulated party must demonstrate that the method is both scientifically defensible and, for Method 2A, meets the substantiality requirement, as specified below:
- (1) *Scientific Defensibility and Burden of Proof.* This requirement applies to both Method 2A and 2B. A regulated party that proposes to use Method 2A or 2B bears the sole burden of demonstrating to the

Executive Officer's satisfaction, that the proposed method is scientifically defensible.

- (A) For purposes of this regulation, "scientifically defensible" means the method has been demonstrated to the Executive Officer as being at least as valid and robust as Method 1 for calculating the fuel's carbon intensity.
 - (B) Proof that a proposed method is scientifically defensible may rely on, but is not limited to, publication of the proposed Method 2A or 2B in a major, well-established and peer-reviewed scientific journal (e.g., Science, Nature, Journal of the Air and Waste Management Association, Proceedings of the National Academies of Science).
- (2) *"5-10" Substantiality Requirement.* This requirement applies only to a proposed use of Method 2A, as provided in section 95486(c). For each of its transportation fuels for which a regulated party is proposing to use Method 2A, the regulated party must demonstrate, to the Executive Officer's satisfaction, that the proposed Method 2A meets both of the following substantiality requirements:
- (A) The source-to-tank carbon intensity for the fuel under the proposed Method 2A is at least 5.00 grams CO₂-eq/MJ less than the source-to-tank carbon intensity for the fuel as calculated under Method 1. "Source-to-tank" means all the steps involved in the growing/

extraction, production and transport of the fuel to California, but it does not include the carbon intensity due to the vehicle's use of the fuel; "source-to-tank" may also be referred to as "well-to-tank" or "field-to-tank."

- (B) The regulated party can and expects to provide in California more than 10 million gasoline gallon equivalents per year (1,156 MJ) of the regulated fuel. This requirement applies to a transportation fuel only if the total amount of the fuel sold in California from all providers of that fuel exceeds 10 million gasoline gallon equivalents per year.
- (3) *Data Submittal.* This requirement applies to both Method 2A and 2B. A regulated party proposing Method 2A or 2B for a fuel's carbon intensity value must meet all the following requirements:
- (A) Submit to the Executive Officer all supporting data, calculations, and other documentation, including but not limited to, flow diagrams, flow rates, CA-GREET calculations, equipment description, maps, and other information that the Executive Officer determines is necessary to verify the proposed fuel pathway and how the carbon intensity value proposed for that pathway was derived;
 - (B) All relevant data, calculations, and other documentation in (A) above must be submitted electronically, such as via

email or an online web-based interface, whenever possible;

- (C) The regulated party must specifically identify all information submitted pursuant to this provision that is a trade secret; “trade secret” has the same meaning as defined in Government Code section 6254.7; and
 - (D) The regulated party must not convert spreadsheets in CA-GREET containing formulas into other file formats.
- (f) *Approval Process.* To obtain Executive Officer approval of a proposed Method 2A or 2B, the regulated party must submit an application as follows:
- (1) *General Information Requirements.*
 - (A) For a proposed use of Method 2A, the regulated party’s application must contain all the information specified in section 95486(c), (e), and (f)(2);
 - (B) For a proposed use of Method 2B, the regulated party’s application must contain all the information specified in section 95486(d), (e)(1), (e)(3), and (f)(2).
 - (2) *Use of Method 2A or 2B Prohibited Without Executive Officer Approval.* The regulated party must obtain the Executive Officer’s written approval pursuant to section 95486(f)(5) of its application submitted pursuant to section 95486(f)(1) above before using a proposed Method 2A or 2B for any purpose under the LCFS regulation. Any use of a proposed Method 2A or 2B before

Executive Officer approval is granted shall constitute a violation of this regulation for each day that the violation occurs. A regulated party that submits any Information or documentation in support of a proposed Method 2A or 2B must include a written statement clearly showing that the regulated party understands and agrees to the following:

- (A) All information not identified in 95486(e)(3)(C) as trade secrets are subject to public disclosure pursuant to title 17, CCR, sections 91000-91022 and the California Public Records Act (Government Code § 6250 et seq.); and
 - (B) If the application is approved by the Executive Officer, the carbon intensity values, associated parameters, and other fuel pathway-related information obtained or derived from the application will be incorporated into the Method 1 Lookup Table for use on a free, unlimited license, and otherwise unrestricted basis by any person;
- (3) *Completeness/Incompleteness Determination.* After receiving an application submitted under this section, the Executive Officer shall determine whether the application is complete within 15 work days. If the Executive Officer determines the application is incomplete, the Executive Officer shall notify the regulated party accordingly and identify the deficiencies in the application. The deadline set forth in this provision

shall also apply to supplemental information submitted in response to an incompleteness determination by the Executive Officer.

- (4) *Public Review.* After determining an application is complete, the Executive Officer shall publish the application and its details on ARB's website at <http://www.arb.ca.gov/fuels/lcfs/lcfs.htm> and make it available for public review. The Executive Officer shall treat all trade secrets specifically identified by the regulated party under section 95486(e)(3)(C) above in accordance with 17 CCR §§ 91000-91022 and the California Public Records Act (Government Code section 6250 et seq.).
- (5) *Final Action.* The Executive Officer shall take final action to approve an application for approval of a new carbon intensity value and associated fuel pathway submitted pursuant to this subsection (f) by amending the Lookup Table(s) in accordance with the rulemaking provisions of the Administrative Procedure Act (Government Code section 11340 et seq.). The Executive Officer shall notify the regulated party accordingly and publish the final action on ARB's website at <http://www.arb.ca.gov/fuels/lcfs/lcfs.htm>. If the Executive Officer disapproves an application, the disapproval shall identify the basis for the disapproval.

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APPENDIX I

State of California
Environmental Protection Agency
AIR RESOURCES BOARD

**CALIFORNIA'S LOW CARBON FUEL STANDARD
FINAL STATEMENT OF REASONS**

December 2009

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2. Carbon Intensity for CARBOB and Diesel Fuel

The regulation contains specific regulatory provisions for determining the carbon intensity for diesel fuel and “CARBOB”—the blendstock to which ethanol is added to produce finished California gasoline. The Method 1 lookup table sets forth single total CARBOB and diesel fuel carbon intensity values covering crude production, refining, use of the fuel, and all transportation and distribution activities. The carbon intensity values are based on the average crude oil delivered to California refineries in 2006, and the average California refinery efficiencies in 2006 (2006 was the last year for which data were available). As shown in the tables set forth above, the Method 1 total carbon intensities are 95.86 gCO₂e/MJ for California CARBOB and 94.71 gCO₂e/MJ for California diesel fuel. The portion of the total average carbon intensity values that is attributable to the average carbon intensity of producing and transporting the crude oil for California CARBOB and diesel fuel is 6.93 gCO₂e/MJ.

With the exception described below, regulated parties must use these single carbon intensity values for all California CARBOB and diesel fuel regardless of the actual carbon intensity of producing or

transporting the specific crude oil used, or the specific refinery operations. This approach is taken to reduce the incentive for regulated parties to comply with the LCFS by shifting to less carbon-intensive crude oils or refinery operations. Use of less carbon intensive crude oils would likely do nothing to reduce global GHG emissions because the higher carbon-intensive crude oils replaced would be refined and used elsewhere. California refineries and large oil extraction operations will be subject to the upcoming AB 32 cap and trade program, so any reductions in GHG emissions from these activities will be counted in that program. The objective of the LCFS program is to stimulate more fundamental changes to the transportation fuel pool, moving towards fuels that meet the much lower carbon intensities needed to meet long-term GHG emissions goals. This objective is best served by identifying single carbon intensity values for almost all CARBOB and diesel fuel, and not allowing revised pathways to be established under Method 2A for CARBOB and diesel fuel with lower carbon intensities.

The Method 1 default carbon intensity values apply to all CARBOB and diesel fuel produced from crude oil that made up 2.0 percent or more of the 2006 California baseline crude mix by volume as shown in California Energy Commission records (“included in the 2006 California baseline crude mix”). The default Method 1 values also apply to CARBOB and diesel fuel produced from any other crudes except high carbon-intensity crude oils (HCICOs)—those for which the total crude production and transport carbon intensity value is greater than 15.00 gCO₂e/MJ. This threshold differentiates lower carbon intensity primary and secondary production from higher carbon intensity fuel production. Examples of HCICOs include certain

crude oils produced from oil sands, oil shale, or through thermal enhanced oil recovery processes.

The two percent threshold is designed to differentiate established crude sources that made up a significant fraction of the California crude oil supply in 2006 from potential emerging crude sources that could be a significant part of the crude supply in the future and could significantly increase the overall average carbon intensity attributable to crude oil. The two percent threshold brings in more than 95 percent of the total California crude supply in 2006; it is appropriate to provide for additional consideration of the potential carbon intensity effects from the remaining potential emerging crude sources.

For CARBOB and diesel fuel made from any HCICO that was not included in the 2006 California baseline crude mix, the regulated party could not initially use the otherwise-applicable Lookup Table value based on average carbon intensity values. Instead, the regulated party would have to use Method 2B to generate an additional pathway for this type of crude oil (alternatively, a previously approved pathway could be used if it is applicable to the crude oil in question). If Method 2B shows that the carbon intensity for crude production and transport has been reduced to no more than 15.00 gCO₂e/MJ—through technologies such as carbon capture and sequestration—the CARBOB or diesel fuel resulting from such crude production would qualify for the default carbon intensity values based on overall averages. Otherwise, the actual carbon intensity from production and transport of the crude would have to be used.

The HCICO that qualifies for the default average carbon intensity values under Method 1 is California crude oil produced using TEOR. The estimated carbon intensity from production and transportation of this crude oil is 18.89 gCO₂e/MJ. Because the production facilities are situated in California, they will be subject to the AB 32 cap and trade program that is scheduled to start in 2012. We expect that the cap and trade program will result in either application of technologies at the production facilities that reduce the carbon intensity below 15.00 gCO₂e/MJ, or the acquisition of credits from other GHG emission reduction activities that achieve the equivalent to such a reduction in carbon intensity. The California cap and trade program will not apply to out-of-state HCICO production facilities, although there is a possibility it could be part of a broader regional program under the WCI. However, if those out-of-state facilities demonstrate equivalent reductions, they will be able to bring themselves under the 15.00 gCO₂e/MJ threshold level and become subject to the same average carbon intensity values as apply to the volumes of HCICO produced in California.

At this time, HCICO produced from oil sands is most likely to come to California from Canadian producers. However, current projections of imports from Canada strongly suggest that such HCICO is not likely to be imported to or processed by refineries in California for a number of years. According to the Energy Information Administration (EIA), total crude imports to the United States from Canada were 716 million barrels in 2008. For the same year, the total crude imports to the western states, (PADD 5) the Pacific Northwest, from Canada were 55 million barrels. According to the California Energy Commission (CEC), 644 million barrels of crude were processed by

California refineries in 2008. This is about 90 percent of the total Canadian exports to the U.S. Without significant increases in crude oil production for export, crude oil from Canada is not available for export in significant volumes to California.

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C-238. Comment: The LCFS is/may be discriminatory against Canadian oil sands and other sources of unconventional crude oil. Oil sands crude has a carbon intensity similar to or less than many “conventional” crude oil sources including some crude sources which are “included in the 2006 California baseline crude mix”. (CAPP1, GOVTCANADA, CNAES, CCG, AE1, AE2)

Discrimination against Canadian oil sands crude oil may be perceived as creating an unfair trade barrier and could be contrary to international trade obligations of the United States. (GOVTCANADA)

Response: The LCFS does not discriminate against any source of crude oil. The average carbon intensity values for CARBOB, gasoline, and diesel shown in the Lookup Table are calculated using a weighted average of fuels derived from 2006 California baseline crude oil sources. Assigning an average carbon intensity value to fuels derived from California baseline crude oil sources will prevent shuffling of these crudes to distant markets. All other crude oil sources that are not “included in the 2006 California baseline crude mix” must be evaluated individually when used in the California fuel market. Those sources with a production and transport carbon intensity similar to the average (less than or equal to a threshold of 15 gCO₂e/MJ) will be classified as “non-high carbon

intensity crude oil” sources and fuels derived from these sources will also receive the average carbon intensity value shown in the Lookup Table. Those sources with a production and transport carbon intensity greater than 15 gCO₂e/MJ will be classified as “high carbon intensity crude oil” sources and fuels derived from these sources must use the carbon intensity for their specific pathway as determined by Method 2B (or the Lookup Table if a pathway assessment for a similar crude source has already been completed). Producers of “high carbon intensity crude oil” may use control measures, such as carbon capture and sequestration or other methods, to reduce the carbon intensity for production and transport to 15 gCO₂/MJ or less and be assigned the average carbon intensity value from the Lookup Table.

The LCFS therefore differentiates between crude oil sources that were used in significant quantities in California in 2006 (e.g. “included in the 2006 California baseline crude mix”) and those crude sources that were not used in significant quantities in 2006. Crude sources which fall into this latter category are treated equally as each must undergo a pathway specific carbon intensity determination as they enter the California market. The only “high carbon intensity crude oil” that is included in the 2006 California baseline crude mix and therefore qualifies for the default average carbon intensity values under Method 1 is California crude oil produced using thermal enhanced oil recovery processes. The estimated carbon intensity from production and transportation of this crude oil is approximately 19 gCO₂e/MJ. We do not believe that this crude oil and Canadian oil sands crude oil are “like products” because the production facilities situated in California will be subject to the AB 32 cap and trade program that is scheduled to start

in 2012. We expect that the cap and trade program will result in either application of technologies at the production facilities that reduce the carbon intensity below 15.00 gCO₂e/MJ, or the acquisition of credits from other GHG emission reduction activities that achieve the equivalent to such a reduction in carbon intensity. The California cap and trade program will not apply to out-of-state “high carbon intensity crude oil” production facilities, although there is a possibility it could be part of a broader regional program.

The Board has directed ARB staff to conduct comprehensive program reviews in both 2011 and 2014. The crude oils considered to be part of the California baseline mix and the potential change in the carbon intensity of crudes included in the California baseline mix would necessarily be evaluated during these and subsequent program reviews and addressed via regulatory change if deemed necessary. Additionally, following enactment of the AB 32 Cap and Trade Program, ARB would consider program modifications which recognize equivalent, enforceable emissions reductions resulting from carbon management programs enacted by out-of-state governments. But ARB believes that the issue raised by the commenters is particularly significant, and in the coming year ARB may consider whether near-term revisions to the regulation addressing this issue are appropriate.

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C-241. Comment: Differentiating or discriminating against Canadian oil sands crude oil is unnecessary because the carbon intensity of all mainstream crude oil sources falls within a

narrow range and the majority of the emissions occur during fuel combustion. (CAPP1, CNAES, CCG, AE1, AE2)

Response: Please see the responses to Comments C-238, C-239, and C-240.

With regard to the carbon intensities of crude sources, we do not agree that all mainstream crude oil production methods have similar carbon intensities. Our calculations show that carbon intensities for mainstream crude oil production methods range from about 4 to more than 20 gCO₂e/MJ. Requiring all crude sources not part of the 2006 baseline mix to be evaluated individually will help to ensure that increased use of “high carbon intensity crude oil” production methods are accurately accounted for within the regulation. It will also provide greater incentive for these producers to reduce emissions through CCS or other methods.

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C-249. Comment: We are not sure that ARB is applying the principle of indirect effects enforcement in a balanced and consistent way. For example, ARB staff has made clear their inclination to debit all crop-based ethanol for ILUC, irrespective of the type or location of the land used for production. However, on the subject of tar sand petroleum use by oil companies, ARB staff has implied only that oil companies will be debited if they use tar sands in California. Put another way, the penalty for biofuels is automatic while the penalty for oil can be avoided by redistributing its product. This creates obvious compliance inequities, but also questionable climate accounting in the marketplace. Oil companies

will simply use lighter crude in California to escape penalty under the LCFS. But this decision will short supply of light crude elsewhere and increase the demand for tar sands and other resource intensive crude with obvious climate impacts. Requiring oil companies to account for tar sands use abroad is the definition of a market-mediated effect. Yet ARB seems more inclined to enforce market-mediated effects against ethanol, for land use change, than indirect effects against oil companies for heavy crude and tar sands. (NFA1)

Response: The LCFS will not debit crop-based biofuels for land use change emissions irrespective of the type or location of land used for production. In Resolution 09-31, the Board directed staff to work with interested stakeholders to develop criteria and a list of specific biofuel feedstocks that are expected to have no or inherently negligible land use effects on carbon intensity and propose amendments, if appropriate, to the regulation resulting from this analysis by December 2009. These criteria and list of feedstocks will be included as part of a guidance document prepared by ARB to streamline the application process for a carbon intensity determination under Method 2. The overriding criterion that must be met before a fuel can be included on this list is that production of its feedstock must not compete with the production of food. The specific criteria are expected to include the following:

- Fuel feedstock crops grown on abandoned farmland that is currently degraded. Crops grown in this way do not compete with food crops, but they could also prove to be environmentally beneficial. In addition to

their potential to improve wildlife habitat and water quality, perennial feedstock crops could increase soil carbon sequestration.

- Crop residues. Although crop residues increase soil fertility, decrease erosion, and improve soil carbon stores when left on fields, some residues can be removed without compromising these benefits. The removable fraction is capable of supporting the production of significant quantities of biofuels.
- Double and mixed cropping. Biofuel crops that can be grown and harvested between existing food cropping cycles (and which do not interfere with those cycles) meet the criterion established above. The same is true for crops that can be grown along with food crops (such as between food crop rows).

ARB acknowledges that California's LCFS, enforced in isolation, may temporarily increase the potential for crude oil shuffling. However, as the LCFS regulation becomes more widely adopted by other governments the potential for crude shuffling will be greatly diminished. Moreover, the potential for fuel shuffling is not limited to petroleum-based fuels. It is highly likely that supplies of ethanol with the lowest carbon intensity will be sent to California with the remaining "high intensity" ethanol being sold outside of California. The LCFS does not account for this market-mediated effect which obviously benefits producers of low carbon intensity ethanol but does not result in reductions in greenhouse gas emissions on a global scale. However, as the LCFS regulation becomes more widely adopted the potential for ethanol shuffling will also be greatly diminished. See response to Comment C-247.

I-72. Comment: Unfortunately these proposed rules, if implemented, may not decrease CO2 emissions as predicted, may cost the citizens of California further economic pain and suffering, may increase our dependence on imported fuels and harm the economy of the agricultural sector in the U.S. resulting in higher food, fuel, and feed costs. (ILCORN)

Response: By lowering the carbon intensity of transportation fuels, the LCFS will reduce CO2 emissions. We have taken into account the effects of other transportation- related measures that will impact fuel use, such as Pavley regulations and SB 375, so that no double-counting of benefits has occurred. Our economic analysis indicates that the LCFS may either result in overall cost savings or be cost-neutral to the consumer, although some costs may occur if crude prices decline and alternative fuel production costs are higher than estimated.

One of the key advantages of the LCFS and the federal RFS2 is that it reduces our dependence on foreign oil. Although some of the alternative fuels may be imported—Brazilian sugarcane, for example— most of the fuels will be produced in the United States. Finally, by including indirect land use change in the lifecycle analysis of biofuels, the LCFS ultimately discourages food-crop-based biofuels and encourages those that do not have such land use impacts, such as waste products: biomass, yellow grease, and tallow.

Current Economic Climate

I-91. Comment: The economics are clearly important, especially in the context of the current recession. Recent volatility in fuel prices has demonstrated how even small fluctuations can impose a great hardship on businesses and consumers alike. (CBPA)

Comment: At this time we're suffering from the recession. We can't afford higher fuel costs. We can't afford to replace our personal and business vehicles with the ones your plan is counting on to get the emissions reductions, even if they do turn out to be available soon, which is doubtful. (CMCC, SVHCC)

Comment: CARB has ignored the current economic conditions we are all facing in California. Consider all the facts, including the current state of the economy and the global nature of global warming, before imposing yet another financial burden on a state increasingly less able to afford it. (CBCOC1)

Comment: We have asked for the AB 32 process to be slowed down so that the necessary economic analysis could be completed and regulation adopted that wouldn't put a lot of folks out of business and hurt our economy anymore that it has already done. We've been told that is impossible because of statutory deadlines. Consequently, the Black Chamber is sponsoring 5B 295. It doesn't ask to stop AB 32, but to wait until the economy is in better condition to bear the costs of implementation. It's tied to the unemployment rate—which right now is higher than it's been in 25 years or so. (CBCOC1)

Comment: And it's unlikely the LCFS will materially reduce global warming, since California will be the only place in the country or even on the planet to pursue such an aggressive program, during this time of international recession and when California is experiencing an unemployment rate of 11.2 percent, record unemployment rate. (NFIB)

Comment: The agriculture production industry is not in the position to pass along the potential higher diesel costs or any other costs, for that matter, onto consumers. California farmers are already suffering from the cost of the cumulative regulations placed on them and a downward spiral of the economy. California production farmers are either leaving California to farm elsewhere or are closing down their farms completely. (WG)

Comment: While we support the diversification of our fuel technology and supply and driving innovation to reach our AB 32 goals, we must also be sensitive to the current state of the economy. (CCOC)

Comment: If you go ahead with this rule now, without honestly assessing the costs and benefits, you could well be imposing extreme financial burdens on an already-struggling economy, without making a dent in global warming. (HCCCCC)

Comment: As a small business person, I've seen my customer base decrease and my costs increase as a result of not only the bad economy, but the State's budget deficit. People who can't afford it are scaling back or canceling their insurance. And

those who can are being careful about how much they carry. (CHCC1)

Comment: One of the anticipated benefits of the program was the expected construction of facilities to produce biofuels and other fuels in the state of California to generate “green” jobs, use local feed stocks and improve fuel reliability/security concerns. Based on the current situation in the state, these anticipated developments are in question and ARB needs to assess whether these benefits will materialize. (WSPA1)

Comment: The San Joaquin Valley is suffering more than the rest of the state in this economic recession. Our members, mostly small and minority-owned businesses, care about the environment. But because they have to stretch everyone single one of their own pennies just to stay alive, they expect the agencies that make rules impacting how they do business and what it costs to be equally careful about the costs. (SJCHCC3)

Response: We are sensitive to the current economic situation of the State, and, as required by AB 32, developed the LCFS in a manner that minimizes costs and maximizes the total benefits to California. The CI standards in the LCFS are back-loaded, meaning more GHG emissions reductions and corresponding compliance costs will occur in the later years of compliance when lower-CI fuel technology has matured and been commercialized. The LCFS compliance schedule allows time for future investments to be made in California-based biofuel technologies and related jobs when the economy has had a chance to improve.

Although there may be a slight cost in the early years of compliance to bring modest volumes of lower-CI fuels to California, we expect that ultimately there will be no impact or a slight savings to the consumer's fuel cost from implementing the LCFS.

Regarding the LCFS forcing consumers to eventually buy a different kind of car sooner than planned, the LCFS regulation does not mandate specific volumes of specialized cars and we do not expect the consumer or small businesses to be forced to replace their current vehicles in order for the LCFS to be successful. However, as alternative fuels become more cost-competitive with traditional fuel, specialized vehicles will become a more attractive option to consumers.

Penalty for Unconventional Petroleum Resources

I-92. Comment: Discrimination among petroleum-based fuels is not necessary to achieve the purposes of the AB 32 program and would in fact be counterproductive. The primary effect would be to discourage imports to California of fuels derived from other unconventional resources in North America, such as oil sands in Canada or oil shale in the Western U.S. This would have an inflationary effect on fuel prices in California, as these cost effective North American fuels would not be available. The adverse economic impacts would affect low income citizens disproportionately, an effect that AB 32 expressly seeks to prevent. The California economy would suffer, but worldwide emissions would not be reduced and in some cases would be increased. This is precisely the situation that AB 32 and AB 1007 seek to avoid, in requiring a regulatory program "that is equitable, seeks to minimize costs and

maximize total benefits,” and “minimizes the economic costs to the state” (secs. 38562(b)(1), 43866(b)(2)). It is also apparent that the costs of discrimination against non-conventional fuels would far outweigh the potential benefits, if any. We did not see any discussion of this issue in the economic and environmental analyses accompanying the proposed LCFS. The potential GHG reduction benefits of the discriminatory provisions would be negligible. (CNAES)

Response: The LCFS standards are based on Governor Schwarzenegger’s Executive Order S-01-07, which requires the ARB to develop a low carbon fuel standard that reduces the carbon intensity of transportation fuels by at least 10 percent by 2020. We have identified alternative transportation fuels that would meet these requirements and potentially result in overall savings to Californians. (See previous responses.)

By its nature, the LCFS discourages the use of higher-carbon-intensity fuels, such as petroleum-based fuels from oil sands and oil shale, regardless of price. However, we believe that, with a worldwide economic recovery and a diminishing supply of crude oil, crude prices will rise, making alternative fuels more competitive.

An important goal of the LCFS is to establish a durable fuel carbon regulatory template that is capable of being exported to other jurisdictions. The successful implementation of an effective framework in one jurisdiction should hasten the adoption of that framework elsewhere. Without the wider adoption of fuel carbon-intensity standards, fuel producers are free to ship lower-carbon-intensity fuels to areas with such standards, while shipping higher-carbon-

intensity fuels elsewhere. The end result of this fuel “shuffling” process is little or no net change in fuel carbon-intensity on a global scale. With a widespread adoption of an LCFS, significant reductions in fuel carbon intensity will begin to be realized on a global scale. It is ARB’s intent to continue coordinating California’s LCFS program efforts with those of other interested entities, including a regional consortium of eleven Northeastern and Mid-Atlantic States, Oregon, and the European Union.

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Macroeconomic Analysis

I-94. Comment: Finally, Staff does nothing in their study to truly measure economic impact using an input output model that can measure the direct, indirect, and induced costs or benefits that account for the multiplier effect on the economy and jobs and take into account regional economic dynamics. They also do not use any economic model such as the EDRAM model used for the scoping plan. With no economic modeling or major sensitivity analyses, the Staff economic analysis is not robust, reliable, or understandable. Their analysis could benefit by incorporating many of the important and critical but omitted economic principles that drive economic impact studies. In this sense the Staff study reads more like an afterthought to support a decision already made, and a strong opinion expressed without much numerical support. (CSBR2, CSBR3)

Response: We considered using an equilibrium model, such as the Environmental- Dynamic Revenue Analysis Mode (E-DRAM), to conduct a macroeconomic analysis of the proposed regulation. A model

such as E-DRAM is most useful when it is used to evaluate the economic impacts of a large-scale policy on the State economy. The model can be informative at the sector level with the understanding that some details that may be important in characterizing how producers will respond to a policy change may not be fully reflected in the model. Because the economic effects of this regulation depend in large part on those responses by the producers, we determined that this type of macroeconomic analysis would not provide useful additional information.

Nevertheless, some general impacts of the LCFS can be assumed:

- Biofuels will displace some percent of petroleum-based transportation fuels.
- The displaced fuels will first be imported blendstocks for transportation fuels, as the State's refineries cannot meet the current demand for these fuels.
- Reducing the volume of transportation fuels that are imported from other states will reduce foreign imports of oil into the U.S.
- State's refineries will continue to operate at capacity during this period. If State demand for fuel declines below this capacity, we assume refineries will export fuels at some loss in value since California RFG3 has a premium value.
- The biorefineries expected to be built in the State will provide needed employment, an increased tax base for the State, and value added to the biomass used as feedstock. These benefits will be more important in rural areas

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of the State that are short on employment but rich in natural resources.

- Displacing imported transportation fuels with biofuels produced in the State keeps more money in the State.

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