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Legal Uncertainties Plague Carbon Foot Printing of Biomass Energy

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The threat of climate change has spurred governments to take action to reduce emissions of greenhouse gases (GHGs) from transportation and power generation. An important part of this policy design includes accurately accounting for the lifecycle GHG emissions of the alternatives to fossil fuels. Both the U.S. Environmental Protection Agency (U.S. EPA) and the California Air Resources Board (ARB) have made determinations about the carbon footprint of biomass-based energies, but two recent federal court decisions demonstrate the difficulties they may face incentivizing biomass-based energy through application of carbon accounting methodologies.

U.S. EPA's Tailoring Rule and Biogenic Carbon Neutrality

In May 2010, EPA issued what is now commonly known as the Tailoring Rule to curtail GHG emissions from stationary sources such as coal-fired power plants. EPA phased in implementation of GHG permitting under the Clean Air Act's Prevention of Significant Deterioration (PSD) and Title V programs by setting threshold triggering of permit requirements above that contained in the statute for other regulated pollutants. EPA contends that this "tailoring" is necessary to avoid overwhelming permitting burdens that would occur if lower statutory thresholds were used. As part of its roll-out of the program, EPA exempted for three years permitting of biogenic carbon sources in order to avoid the same permitting burdens and concurrently to give the Science Advisory Board (SAB) time to study and recommend an appropriate GHG accounting methodology. The deferral meant that any facility built during that three years and using what EPA deemed as carbon-neutral biogenic sources (e.g., wood or other plant-based biomass) would be permanently exempted from GHG permitting unless some facility modification occurred after the initial exemption period. The SAB eventually concluded that EPA's carbon accounting framework should not assume biomass' carbon neutrality.

In the meantime, environmental groups challenged the deferral in federal court. In their petition, they argued that EPA acted arbitrarily and capriciously because the plain language of the Clean Air Act-that EPA must control the potential to emit "any air pollutant" from any stationary "major emitting facility"-forecloses blanket exemptions of biogenic carbon from GHG permitting or any other carbon emission. EPA countered that it had to move in a "step-by-step" manner in order to study the science of biogenic

carbon accounting.

In its July 2013 opinion in Center for Biological Diversity v. EPA, the D.C. Circuit Court of Appeals sided with environmental groups. It concluded that EPA failed to explain its interpretation of the Clean Air Act's requirement that it regulate "any air pollutant," and how it was on its way to meeting Congress' mandate to do so with regard to biogenic emissions. Further, the Court did not buy EPA's claim that the deferral was an administrative necessity, as EPA could have pursued the middle-ground alternative of requiring *some* measurement and control during the best available control technology (BACT) analysis, which is part of Clean Air Act stationary source permitting. Lastly, the Court resisted EPA's attempt to justify *post hoc* the exemption to avoid absurd results-that some biogenic sources actually decrease net carbon emissions, and therefore permitting would not make sense. The Court vacated the deferral rule and left for another day an analysis of whether or not permanent exemption would be justified scientifically.

The Constitutionality of California Low Carbon Fuel Standard's (LCFS) Carbon Accounting

More recently, the federal Ninth Circuit Court of Appeals in *Rocky Mountain Farmers Union v. Corey* had the opportunity to decide whether or not California's application of carbon accounting to all fuels sold in California through the LCFS is unlawful discrimination barred by the Dormant Commerce Clause of the U.S. Constitution. At issue is ARB's counting of carbon emissions from transportation of ethanol into the state, and use of coal-based electricity to power ethanol refineries. A coalition of groups representing Midwestern corn ethanol interests claimed that such accounting is discriminatory on its face, and where successful at the trial court level. A finding of facial discrimination is a much higher obstacle for ARB to overcome legally, as it must prove no other less discriminatory method exists to address the alleged problem. If a court finds no facial discrimination exists, but may in application, courts apply a balancing test between the state's legitimate state interest and the burden placed on commerce.

Two of the three judges on the panel overruled the district judge, however, concluding that no facial discrimination exists. Citing two Supreme Court decisions from the 1990s that addressed imposition of increased fees for out of state dumping of wastes, the Court concluded that a state can impose accounting for a justifiable fair share of increased costs to it from an out of state activity, and that ARB's lifecycle analysis scientifically justifies the imposition of accounting penalties to Midwestern facilities because of the climate risk to California from their emissions. The judges further held that imposition of the accounting to transport and use of coal-based power was not inherently discriminatory because the effect is not isolating and directing business to locals. That is, to make corn-based ethanol, the judges reasoned that California biorefineries would be charged an even higher transport penalty to import corn feedstocks into the state because corn is heavier than ethanol. They further indicated that Midwestern facilities are not held hostage to the LCFS penalty, as demonstrated by the fact that some biorefineries have successfully achieved individualize pathways with lower scores through the use of cleaner alternatives to coal-based electricity. The majority viewed the carbon accounting as treating all electricity used by all producers, whether inside or outside of California, the same way.

The petroleum petitioners made the additional argument that the electricity penalty strips Midwestern facilities of their competitive advantage of having located near cheaper sources of corn and electricity, thus resulting in impermissible discrimination. The majority did not see it that way, reasoning that: (1) Midwestern facilities still enjoy a competitive advantage because they avoid the increased costs of transporting corn that California facilities do not; and (2) being next to coal plant is not "earned," but instead merely imposes the costs of climate change on others. The Court noted that innovators in the Midwest who have changed their energy mix to more renewable sources enjoy the real competitive advantage and that the LCFS facilitates that competitive advantage equally.

The petitioners also had claimed that California's application of carbon accounting amounts to an unlawful extraterritorial application that attempts to control commercial activities in other states. Distinguishing a series of Supreme Court cases in other context, the majority concluded that LCFS does not direct how ethanol should be produced, sold or used outside of California, nor does it require other jurisdictions to adopt reciprocal standards. The judges reasoned that the LCFS makes no effort to ensure that the price of ethanol is lower in CA than in other states, applies no threshold carbon intensity requirement on fuels, and that carbon intensity caps only apply to obligated parties in California. Based on a more recent Supreme Court decision on a case in Maine, the majority concluded that while California cannot mandate compliance with preferred policies in wholly out of state transactions, it may regulate commerce and contracts within its own boundary with the goal of influencing out of state choices

of market participants.

The Future of Carbon Accounting in Public Policies Aimed at Incentivizing Biomass-Based Energy

As the two cases above demonstrate, accounting for the carbon benefits of biomass-based energy policy faces pushback from a diverse set of actors. Environmental groups do not want to see anything other than a limited amount of woody biomass that would already have existed in the market to be used for energy. The *CBD v. EPA* case reveals that environmentalists likely will take the position in future litigation over biogenic carbon accounting in the Tailoring Rule that the statutory language of Clean Air Act is clear: only smokestack emissions can be included in permitting determinations. Thus, EPA would not be able to apply an analysis of total lifecycle emissions that include sequestration, a methodology that could turn out to be a net positive reduction of carbon emissions. While this might be a clever use of strict statutory interpretation concepts typically applied textualist judges, it ignores the large amount of emerging science aimed at determining exactly what the carbon footprint of woody biomass-to-energy may be. Underlying their position is the preference for wind and solar power over any type of additional forest disturbance, even though such management could be beneficial overall to the forest ecosystem or broader climate regulation.

An even more interesting twist to the biogenic carbon accounting saga will be how the U.S. Supreme Court will decide a case they recently granted certiorari on dealing with the broader question of whether or not EPA can even apply GHG accounting to stationary sources at all. The dissenting judge in *CBD v. EPA*, while recognizing his position was a losing one among the en banc panel of the D.C. Circuit in *Coalition for Responsible Regulation, Inc. v. EPA, No. 09-1322 (D.C. Cir. 2012)*, takes the opportunity to reargue his position in *CBD* that EPA does not have the authority under the Clean Air Act to regulate GHG emissions from stationary sources, biogenic or otherwise. The petitioners in *Coalition for Responsible Regulation*, while unsuccessful in convincing the Supreme Court to review the entire basis for GHG regulation in the U.S. (e.g., the EPA's 2010 finding that GHGs cause or contribute to air pollution the endangers public health) have now put on the Supreme Court's docket consideration of at least the validity of the Tailoring Rule in *American Chemistry Council v. EPA* (a companion case to *Coalition*). Such litigation, like the myriad of litigation filed by those seemingly against any action taken by EPA to facilitate renewable fuels and mitigation of climate change, undoubtedly creates harmful uncertainty for the biomass-based energy sector and its efforts to successfully commercialize a new energy paradigm.

At least one commentator predicts that the Supreme Court likely will agree to hear an appeal in the *Rocky Mountain Farmers Union* case. Petitions for rehearing en banc have been filed, claiming that the majority should have applied strict scrutiny to the LCFS's carbon accounting methodologies. While the briefs note a dissenting opinion by Judge Murguia that strict scrutiny should have been applied, they interestingly fail to mention her reasoning: that less restrictive alternatives are available as evidenced by the availability of individualized pathway options available to Midwestern producers. Individualized pathway accounting, versus inapplicability entirely of the two carbon accounting methodologies to transport and electricity, unlikely is the remedy petitioners have been seeking throughout the litigation. At any rate, all the cases discussed herein highlight the enormity of what is at stake in terms of governments' ability to take action to mitigate climate change, and litigation's serious implications for the biomass-based energy sector.