STATE CONSTITUTIONAL LIMITATIONS ON THE FUTURE OF CALIFORNIA'S CARBON MARKET

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Synopsis: California voters approved Proposition 26 in 2010, amending the state constitution to require a legislative supermajority to raise taxes on any citizen. Proposition 26 strengthened the requirements of Proposition 13, an earlier anti-tax provision that applies to pre-2010 statutory authority, including California's 2006 climate law, AB 32. Both propositions are critical to the future of California's carbon market: opponents have challenged the current market's legality under Proposition 13, whereas any legislation to extend the market beyond 2020 would need to confront the requirements of Proposition 26. As California policymakers begin to plan for deeper greenhouse gas emission reductions beyond the 2020 target established by AB 32, the carbon market's future is uncertain, with impacts that reach beyond state borders. Carbon market prices help determine dispatch order in the California Independent System Operator (CAISO) Energy Imbalance Market (EIM) and are part of the discussion over whether to expand CAISO's energy markets. We suggest options for modifying a post-2020 version of California's cap-and-trade system to fit within the constraints of Propositions 13 and 26 using regulatory and legislative approaches, respectively. We conclude with strategic implications for the future of California's climate policy and the role of carbon pricing in western electricity markets.

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I. INTRODUCTION[1]

Fed up with rapidly rising property taxes, California voters adopted Proposition 13 in 1978, amending the state constitution to require a two-thirds supermajority vote to raise taxes.[2] Proposition 13 was poorly drafted and left several key terms undefined, including "tax."[3] Since its passage, state and local governments have relied on these ambiguities to limit the reach of Proposition 13's supermajority requirements. For the most part, the California Supreme Court has facilitated these efforts by narrowly construing Proposition 13's purpose and provisions. For instance, the court has held that certain "fees" are distinct from "taxes," and therefore that state and local governments can enact fees by simple majority vote—so long as the fees are not levied for "general revenue purposes."[4]

In tracing the "frequently blurred" line between taxes and fees, the California Supreme Court has recognized several types of government-imposed charges that qualify as fees rather than taxes and therefore do not trigger Proposition 13's supermajority requirements.[5] These include fees to support license and inspection programs, fees for the use of government property, and fees to pay for the construction of new infrastructure necessitated by private land development.[6] More controversially, in *Sinclair Paint Co. v. State Board of Equalization*, the California Supreme Court also recognized the category of regulatory mitigation fees, which force polluters to bear a "fair share of the cost" of mitigating the adverse effects that their activities generate.[7]

1. We are grateful for feedback from participants in two April 2016 seminars with the Stanford Environmental and Energy Policy Analysis Center (SEEPAC) and the Stanford Policy and Economics Research Roundtable (PERR). We also thank Michael Wara, Kevin Poloncarz, David Victor, A.W. Hofmann, Matthew Christiansen, David Weiskopf, and Michael Pappas for helpful comments. Any errors and all opinions are the sole responsibility of the authors.

2. CAL. SEC. OF STATE, CALIFORNIA VOTER INFORMATION GUIDE FOR 1978, PRIMARY at 56-58 (1978).

3. *See infra* Part II(A).

4. Sinclair Paint Co. v. State Bd. of Equalization, 937 P.2d 1350, 1358 (Cal. 1997).

5. *Id.* at 1354.

6. *See infra* Part II(A).

7. *Sinclair Paint*, 937 P.2d at 1356.

Frustrated by the California Supreme Court's interpretation of Proposition 13 and motivated by a desire to overturn *Sinclair Paint*, a coalition of anti-tax activists and business advocates succeeded in 2010 in passing Proposition 26.[8] Proposition 26 limits the courts' ability to delineate taxes and fees by amending the state constitution to define "tax" as "any levy, charge, or exaction of any kind imposed by the [s]tate."[9] From this broad definition, Proposition 26 carved out five exceptions for certain types of fees that had been previously recognized by the courts.[10] However, none of these exemptions includes a *Sinclair Paint*-type regulatory mitigation fee. Thus, Proposition 26 eliminates regulatory mitigation fees from the universe of charges that qualify as fees and can therefore be enacted by future simple legislative majorities.[11]

While Proposition 26 supersedes Proposition 13 and overturns *Sinclair Paint*, Proposition 26 does not render irrelevant *Sinclair Paint* and the cases that followed it. By its terms, Proposition 26 only applies to taxes levied pursuant to "a change in statute" occurring after January 2010.[12] The result is a bifurcated legal standard. Charges levied pursuant to statutory changes enacted on or after January 1, 2010, are subject to Proposition 26's more stringent definition of tax, while charges levied pursuant to statutes enacted before 2010 are subject to the more lenient tax/fee case law that arose under Proposition 13, including the *Sinclair Paint* regulatory fee doctrine.[13]

The bifurcated legal standards under Propositions 13 and 26 have significant implications for the state's market-based climate policy instruments. California currently has one of the largest greenhouse gas cap-and-trade programs in the world.[14] Because California auctions a portion of its cap-and-trade allowances at government-administered auctions, some opponents of cap-and-trade have argued that the program imposes a tax on regulated entities.[15] The statute that authorized cap-and-trade, AB 32, passed in 2006, and is therefore subject to the more lenient Proposition 13 definition of tax.[16] For its part, the state has argued that its auctions of tradable allowances constitute a valid *Sinclair Paint*-type regulatory mitigation fee under Proposition 13.[17] In *Morning Star Packing v. California Air Resources Board*, a state trial court accepted the state's argument, but found that even under *Sinclair Paint*, it was a "close question" whether permit auctions imposed taxes or fees.[18] As of this writing, the *Morning Star* decision is on appeal under the name

8. CALIFORNIA SEC. STATE, CALIFORNIA VOTER INFORMATION GUIDE FOR 2010, GENERAL ELECTION at 56-61, 114-15 (2010) [hereinafter 2010 VOTER INFORMATION GUIDE].

9. CAL. CONST. art. XIII A, § 3.

10. *Id.* § 3(b)(1)-(5).

11. *Id.* § 3(a).

12. *Id.* § 3(c).

13. *See infra* Part III(B).

14. ALEXANDRE KOSSOY ET AL., WORLD BANK GROUP, 2015 STATE AND TRENDS OF CARBON PRICING 23 (2015).

15. California Chamber of Commerce v. Cal. Air Res. Bd. & Morning Star Packing Co. v. Cal. Air Res. Bd., Nos. 34-2013-80001313 & 34-2013-80001464 (Cal. Super. Ct. Aug. 28, 2013) (hereinafter *Morning Star*), http://www.edf.org/sites/default/files/content/decisionchambermorningstar.pdf.

16. *Id.* at *12-13.

17. *Id.* at *6-7.

18. *Id.* at *16.

of its companion case, *California Chamber of Commerce v. California Air Resources Board*.[19]

Through the *Morning Star*/*California Chamber of Commerce* litigation, Proposition 13's relevance to California's cap-and-trade program is now well understood. In contrast, the role of Proposition 26 in shaping the post-2020 future of state climate policy is not. Because new legislation is likely needed to extend the carbon market—or employ alternative policies that price greenhouse gas emissions—Proposition 26 constrains climate policymakers' options in the post-2020 period.[20]

In turn, the future of California's cap-and-trade system has important implications for the evolution of state climate policy as well as its interaction with other sub-national climate policy structures throughout the world. California linked its carbon market with a similar structure in Québec[21] and is contemplating a similar link with Ontario;[22] Washington State has finalized a Clean Air Rule that contemplates a unilateral link to California's market such that California compliance instruments could be used in Washington but not vice versa;[23] and California has also indicated it plans to link its carbon market to forest carbon management programs in Acre, Brazil, and Chiapas, Mexico.[24] Nevertheless, whether and to what extent cap-and-trade will contribute toward a newly legislated 2030 climate target—reducing greenhouse gas (GHG) emissions 40% below the 2020 target of returning to 1990 levels[25]—remains uncertain, even as CARB begins its 2030 scoping plan process[26] and contemplates the continuation of the cap-and-trade

19. Cal. Chamber of Commerce v. Cal. Air Res. Bd., 2014 WL 5462661 (Cal. Ct. App. 2014) (No. C075930).

20. *See infra* Part V(C).

21. *See generally* Danny Cullenward, *The Limits of Administrative Law as Regulatory Oversight in Linked Carbon Markets*, 33 UCLA J. ENVTL. L. & POL'Y 1 (2015) (reviewing the link between carbon markets in California and Québec).

22. CALIFORNIA AIR RES. BD., UPDATE ON THE POTENTIAL FOR LINKAGE OF CALIFORNIA'S CAP-AND-TRADE PROGRAM WITH ONTARIO 5 (2016).

23. Washington Clean Air Rule, 16-19 Wash. Reg. 047 (finalized Sept. 15, 2016) (to be codified at WASH. ADMIN. CODE § 173-442) (subdivision 110(3) proposing that allowances from external carbon markets could be used for in-state compliance once approved by the Washington regulator); KASIA PATORA & SHON KRALEY, WASH. STATE DEP'T OF ECOLOGY, PUB. NO. 16-02-015, FINAL COST-BENEFIT AND LEAST-BURDENSOME ALTERNATIVE ANALYSES: CHAPTER 173-442 WAC (CLEAN AIR RULE CHAPTER) & 173-441 WAC REPORTING OF EMISSIONS OF GREENHOUSE GASES at 16-18 (2016) (assessing the cost of the final rule by analyzing a scenario in which compliance costs are benchmarked to the secondary market price in California's cap-and-trade program).

24. CALIFORNIA AIR RES. BD., EVALUATION OF THE POTENTIAL FOR INTERNATIONAL SECTOR-BASED OFFSET CREDITS IN CALIFORNIA'S CAP-AND-TRADE PROGRAM 2 (2016).

25. Global Warming Solutions Act of 2006: Emissions Limit, Senate Bill No. 32 (Sept. 8, 2016) (to be codified at Cal. Health & Safety Code § 38566), https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB32; Cal. Governor Edmund G. Brown, Executive Order B-30-15 (Apr. 29, 2015), https://www.gov.ca.gov/news.php?id=18938.

26. *See generally Timeline of AB 32 Scoping Plan Activities*, CAL. AIR RES. BD., http://www.arb.ca.gov/cc/scopingplan/timeline.htm (last updated Sept. 16, 2016) (listing a kickoff public workshop on Oct. 1, 2015, and a series of subsequent meetings to define the process and timeframe for updating CARB scoping plan to address Governor Brown's 2030 climate target).

market in its compliance planning for the Environmental Protection Agency's Clean Power Plan.[27]

The future of the carbon market is equally important to western wholesale electricity markets. Creation of the California Independent System Operator's (CAISO) Energy Imbalance Market (EIM) has forced regulators to confront the fact that California's cap-and-trade rules hold "first deliverers" of electricity responsible for the GHG emissions associated with imports,[28] whereas no other western jurisdiction currently prices GHG emissions.[29] Reflecting states' differing views on carbon pricing, the Federal Energy Regulatory Commission (FERC) approved a CAISO tariff that includes a voluntary GHG "Bid Adder," reflecting facility-level compliance costs associated with delivering resources from outside California into CAISO territory.[30] EIM participants can include the GHG Bid Adder if they are willing to be deemed delivered to CAISO territory; if they do not include a Bid Adder or bid zero dollars, their generation will not be deemed dispatched to CAISO and therefore will not be subject to California's cap-and-trade system.[31] Reconciling California's GHG pricing policies with a broader territory that includes significant coal-fired generation but no explicit carbon pricing will remain important for the continued operation of the EIM, as well as any future expansion of CAISO's real-time and day-ahead energy markets.

The rest of the Article is structured as follows. Part II reviews Proposition 13 and its associated case law. Part III describes Proposition 26, its application to new legislation, and early case law that preserves some of the earlier judicial concepts developed under Proposition 13. In Part IV, we review the structure and function of California's carbon market. We then describe how the existing carbon market and future extensions could trigger judicial review under Propositions 13 and 26 in Part V. Here we also offer suggestions for legislative and regulatory actions that could extend the carbon market beyond 2020 while complying with the applicable restrictions under Propositions 13 and 26. Part VI concludes.

27. CAL. AIR RES. BD., PRELIMINARY DRAFT PROPOSED REGULATION ORDER AND STAFF REPORT (July 19, 2016), http://www.arb.ca.gov/cc/capandtrade/draft-ct-reg_071216.pdf [hereinafter PRELIMINARY DRAFT PROPOSAL].

28. Note that electricity imports are defined in the cap-and-trade system to exclude electricity wheeling. CAL. CODE REGS. tit. 17, § 95802(a)(188) (2016); *id.* § 95102(a) (defining wheeling). Similarly, electricity imports in the cap-and-trade system exclude imports from outside the CAISO balancing authority area to serve retail customers located within CAISO territory but outside California. *Id.* § 95802(a)(188).

29. *Id.* § 95852(b) (assigning a compliance obligation to "first deliverers of electricity" who import electricity); *id.* § 95802(a)(147) (defining "first deliverer of electricity").

30. *California Indep. Sys. Operator Corp.*, 147 F.E.R.C. ¶ 61,213 at P 240 (2014) (conditionally approving the CAISO tariff's GHG Bid Adder subject to minor modifications), *order on reh'g, clarification, and compliance*, 149 F.E.R.C. ¶ 61,058 at P 18 (2014) (rejecting stakeholder concerns that the CAISO GHG Bid Adder violates the U.S. Constitution). *See also* CAL. INDEP. SYS. OPERATOR CORP., FIFTH REPLACEMENT ELECTRONIC TARIFF § 29.32 (Mar. 23, 2016), http://www.caiso.com/Documents/Section29_EnergyImbalanceMarket_asof_Mar23_2016.pdf [hereinafter CAISO Tariff] (describing the function and application of the CAISO GHG Bid Adder).

31. CAISO Tariff, *supra* note 30, § 29.32(b)(1)-(2).

II. PROPOSITION 13

A. *History, Text and Generally Hostile Treatment in the Courts*

On June 6, 1978, California voters responded to years of rapidly rising property taxes[32] by overwhelmingly approving Proposition 13.[33] Heralded as "the leading edge in an apparent taxpayer revolt,"[34] Proposition 13 amended the California Constitution by adding article XIII A, which greatly curtailed the power of state and local governments to levy taxes. Under article XIII A, assessed property values were frozen at their 1975 levels,[35] increases in assessed property values were limited to 2% per year,[36] and property taxes were capped at 1% of assessed values.[37]

Proposition 13 not only slashed property taxes, it also made it more difficult for state and local governments to make up revenue shortfalls by raising other taxes. Article XIII A provided that "any . . . [s]tate taxes enacted for the purpose of increasing revenues" required "an Act passed by not less than two-thirds of all members elected to each of the two houses of the [l]egislature."[38] The new provisions similarly restricted local governments from raising revenues by requiring "a two-thirds vote by qualified electors," before cities, counties, and "special districts" could impose "special taxes."[39]

Not a model of clear draftsmanship, Proposition 13 was confusingly worded and left several key terms undefined.[40] Since its passage, state and local governments have sought to exploit Proposition 13's ambiguities to limit its reach. In

32. Over a span of four fiscal years, beginning in 1967-68 and continuing through 1971-72, property tax revenues in California increased by an average of 11.5% per year. Nodlinger v. Hahn, 505 U.S. 1, 3 (1992) (upholding Proposition 13 against a Fourteenth Amendment challenge alleging that the law unfairly discriminated against new property owners). The legislature enacted property tax relief measures in 1972, but these measures failed to contain property tax increases during a sustained boom in California's real estate market. *Id.* Between 1973 and 1977, median home prices in the state nearly doubled, leading to a sharp increase in assessed property values, and concomitant increases in property taxes. *Id.*

33. California's then-U.S. Senator, Alan Cranston, described the measure as "a two-by-four" wielded by frustrated voters against an unresponsive government. *Proposition 13 is but the Tip of the Iceberg,* N.Y. TIMES, June 11, 1978, at E1.

34. Wallace Turner, *California Voters Approve a Plan to Cut Property Tax $7 Billion*, N.Y. TIMES, June 7, 1978, at A1.

35. CAL. CONST. art. XIII A, § 2(a). The same section provides that property will be reassessed when sold, based on the sale price. *Id.*

36. *Id.* § 2(b).

37. *Id.* § 1(a).

38. *Id.* § 3.

39. *Id.* § 4.

40. Some, though not all, of Proposition 13's restrictions were permissively worded. For example, article XIII A, section 4 read: "Cities and special districts, by a two-thirds vote of the qualified electors of such district, may impose special taxes on such district[.]" L.A. Cnty. Transp. Comm'n v. Richmond*,* 643 P.2d 941, 943 (Cal. 1982) ("The first aspect of the provision which strikes a reader is that its terms are permissive rather than restrictive"). Key terms left undefined include "special district" and, significantly, "tax."

general, courts have abetted state and local governments' efforts by narrowly construing Proposition 13's purpose and provisions.[41] In so doing, the California Supreme Court has stressed the "fundamentally undemocratic nature" of the supermajority requirements in article XIII A,[42] and held that the Proposition 13's language "must be strictly construed and ambiguities therein resolved so as to limit the measures to which the two-thirds requirement applies."[43]

Consistent with this approach, courts have routinely allowed state and local governments to raise revenue by enacting charges by simple majority votes. This outcome is possible because Proposition 13 did not define "tax," a term that, according to the California Supreme Court, "has no fixed meaning."[44] While a broad definition of "tax" "includes all charges upon persons or property for the support of government or for public purposes," California courts have construed "tax" more narrowly in the context of Proposition 13, excluding from its definition, "charges to particular individuals which do not exceed the value of the governmental benefit conferred upon or the service rendered to the individuals, and . . . charges against particular individuals for governmental regulatory activities where the fees involved do not exceed the reasonable expense of the regulatory activities."[45] According to the courts, these non-tax charges are properly designated as "fees" and are beyond the scope of Proposition 13's supermajority requirements.[46]

Since Proposition 13's passage, dozens of charges have been enacted by simple majority votes and challenged under Proposition 13.[47] As one court bemoaned,

41. For example, in *City and County of San Francisco v. Farrell*, the California Supreme Court upheld a payroll and gross receipts tax that had not been approved by a two-thirds supermajority. 648 P.2d 935 (Cal. 1982). To reach this result, the court narrowly construed the term "special taxes" as used in article XIII A, section 4, holding that the term applied only to taxes levied for specific purposes. *Id.* at 940. Because the taxes at issue in the case generated general fund revenue for general government purpose, the court held that they fell outside the ambit of Proposition 13. *Id.* The California Supreme Court reached a similar result in *Los Angeles County Transportation Commission v. Richmond*, where it held that the term "special district" as used in article XIII A, section 4 referred only to those government entities with the power to levy property taxes. 643 P.2d at 947. Because the L.A. County Transportation Commission had no such property taxing authority, the court held that it could impose taxes unencumbered by the supermajority constraints of article XIII A, section 4. *Id. But see* Rider v. Cnty. of San Diego, 820 P.2d 1000, 1006 (Cal. 1991) (limiting *Richmond* by holding that government entities were "special districts" within the meaning of Proposition 13 if they were specially "created to raise funds . . . to replace revenues lost by reason of the restrictions of Proposition 13," regardless of whether the agencies had authority to levy property taxes).

42. *Richmond*, 643 P.2d at 945.

43. *Farrell*, 648 P.2d at 937-38.

44. *Sinclair Paint*, 937 P.2d at 1357.

45. Mills v. Cnty. of Trinity, 166 Cal. Rptr. 674, 676 (Ct. App. 1980).

46. In reaching this conclusion, early tax/fee opinions rested in part on section 50076 of the California Government Code. Enacted in 1979, section 50076 provides that a "special tax" as used in article XIII A, "shall not include any fee which does not exceed the reasonable cost of providing the service or regulatory activity for which the fee is charged and which is not levied for general revenue purposes." CAL. GOV'T CODE § 50076 (West 2015); *Mills*, 166 Cal. Rptr. at 677-78 (discussing section 50076 and noting that "[w]here the Legislature has enacted a law in light of a particular constitutional provision, a settled rule of construction is that the Legislature's interpretation of uncertain constitutional terms is entitled to great deference by the court."); Beaumont Investors v. Beaumont-Cherry Valley Water Dist., 211 Cal. Rptr. 567, 571 (Ct. App. 1985) (by "enacting Government Code section 50076, the Legislature provided a narrow exception to the general limitation of section 4. Section 50076 omits from the category of 'special taxes,' and therefore from the requirement of two-thirds voter approval, any fee which can be shown to be reasonably related to the cost of the service for which it is imposed.").

47. *Sinclair Paint*, 937 P.2d at 1353-54 (discussing tax/fee decisions from 1978 to 1997).

"[d]etermining whether an exaction is a fee or a tax has been a recurring chore since 1978[.]"[48] The resulting body of case law traces the "frequently blurred"[49] line between tax and fee, and recognizes four somewhat overlapping categories of fees that can be enacted by a simple majority vote: (1) special assessments, (2) development fees, (3) user fees, and (4) regulatory fees.

The first three categories are relatively straightforward. First, special assessments are charges imposed on property to fund a permanent public improvement, where the improvement confers a special benefit on the property assessed, beyond that conferred on the public as a whole.[50] Second, development fees are exacted in exchange for the privilege of developing land, and are typically used to offset negative impacts of development on the surrounding community.[51] Third, user fees are charged to offset the cost of a government service that is provided to the fee payer, but is unavailable to those who do not pay.[52]

The fourth category is more complicated. The term "regulatory fees" actually encompasses two related but distinct species of fee: what might be termed a "license fee," and a broader regulatory mitigation fee. License fees support license and inspection programs and collect no more in fees than is necessary to carry out license and inspection activities.[53] In contrast, regulatory mitigation fees refer to fees that are designed to force polluters to bear a "fair share of the cost" of mitigating the adverse effects that their activities generate and discourage harmful conduct by means of a price signal.[54] Among court-recognized fee categories, regulatory mitigation fees have proven most controversial. They also have the most important implications for government's ability to implement market-based climate policy.

B. *Sinclair Paint and the Contours of Regulatory Mitigation Fees*

The seminal case on regulatory mitigation fees is the California Supreme Court's 1997 decision in *Sinclair Paint Co. v. State Board of Equalization*.[55] *Sinclair Paint* concerned the legality of the Childhood Lead Poisoning Act, which assessed a fee on manufacturers of lead paint to pay for programs that identified and treated children suffering from lead poisoning.[56] Because the Childhood Lead

48. California Ass'n of Prof'l Scientists v. Dep't of Fish & Game, 94 Cal. Rptr. 2d 535, 538 (Ct. App. 2000).

49. *Sinclair Paint*, 937 P.2d at 1354.

50. *See, e.g.*, Knox v. City of Orland, 841 P.2d 144, 146 (Cal. 1992) (assessment for park maintenance); Evans v. City of San Jose, 4 Cal. Rptr. 2d 601, 607 (Ct. App. 1992) (assessments on businesses for downtown promotion).

51. *See, e.g.*, Cal. Bldg. Indus. Ass'n v. Governing Bd., 253 Cal. Rptr. 497, 511 (Ct. App. 1988) (school facilities fees).

52. *See, e.g.*, Isaac v. City of L.A., 77 Cal. Rptr. 2d 752 (Ct. App. 1998) (liens on master-metered apartment buildings for the collection of past due and estimated future billings for water and electric power).

53. *See, e.g.*, Cal. Farm Bureau Fed'n v. State Water Res. Control Bd., 247 P.3d 112, 118-20 (Cal. 2011) (license fees charged to holders of water rights to support monitoring activities by the state).

54. *See, e.g.*, *Sinclair Paint*, 937 P.2d at 1356 (concerning a fee assessed on manufacturers of lead paint to pay for programs aimed at mitigating childhood lead poisoning).

55. *Id.*; *see also* CARA HOROWITZ ET AL., SPENDING CALIFORNIA'S CAP-AND-TRADE AUCTION REVENUE: UNDERSTANDING THE *SINCLAIR PAINT* RISK SPECTRUM (2012).

56. *Sinclair Paint*, 937 P.2d at 1352.

Poisoning Act passed by a simple majority vote, Sinclair challenged the law as an impermissible tax under Proposition 13.[57] According to Sinclair, the Childhood Lead Poisoning Act merely required paint companies to pay a fee without imposing any licensing requirements and therefore the Act could not be deemed "regulatory in nature."[58] Rather, Sinclair contended, the Act was passed for the purpose of raising revenue, placing it squarely on the tax side of the tax-fee line.[59]

The California Supreme Court rejected this argument. Instead, the court recognized that so-called "mitigating effects" fees require "polluters or producers of contaminating products" to "bear a fair share of the cost of mitigating the adverse health effects their products created in the community[.]"[60] Because such fees "'regulate[]' future conduct by deterring further manufacture, distribution, or sale of dangerous products" the court found they are no less "'regulatory' in nature than . . . permit or licensing programs[.]"[61]

The court then identified three requirements for a valid regulatory mitigation fee.[62] First, the "primary purpose" of the fee must be to regulate, rather than raise revenue.[63] Second, the total amount of the fees collected cannot "exceed[] the reasonable cost" of the regulatory activities they support and cannot be used for "general revenue purposes."[64] Third, there must be a "fair or reasonable relationship" between the fees assessed and the "social or economic 'burdens'" imposed by the fee payers' activities.[65] According to the court, a regulatory fee that met these three requirements could be "valid despite the absence of any direct benefit accruing to the fee payers."[66] Because Sinclair's argument only addressed the first of the three requirements, the court remanded.[67]

Subsequent decisions have elaborated on the *Sinclair Paint* test. A full analysis is beyond the scope of this article, but several aspects of the doctrine merit mention.[68] Regarding the test's first prong, courts have been more willing to find that a fee's "primary purpose" is regulatory when fees are collected in a segregated account earmarked for specific regulatory purposes, rather than deposited into the state's general fund.[69] Regarding the second and third prongs of the *Sinclair Paint* test, courts have held that "[l]egislators need only apply sound judgment and consider probabilities according to the best honest viewpoint of informed officials" to

57. *Id.* at 1350.

58. *Id.* at 1355-56.

59. *Id.* at 1355.

60. *Id*. at 1356.

61. Sinclair Paint, 937 P.2d at 1356.

62. *Id.* at 1358.

63. *Id.*

64. *Id.*

65. *Id.* at 1357-59.

66. *Sinclair Paint*, 937 P.2d at 1355.

67. *Id.* at 1356, 1359.

68. For more on the *Sinclair Paint* doctrine and its application to California's cap-and-trade program, *see generally* HOROWITZ ET AL., *supra* note 55.

69. *Cal. Farm Bureau Fed'n*, 247 P.3d at 124 ("Reference to the statutory language reveals a specific intention to avoid imposition of a tax. By its terms, section 1525 permits the imposition of fees only for the costs of the functions or activities described, and not for general revenue purposes.").

determine the amount of a regulatory fee.[70] Because "[c]omplex regulatory programs involve complex accounting methodologies," the government can establish that fees do not exceed the "reasonable" costs of the regulatory activities simply by showing that the costs of regulatory activity exceed the costs the amount of fees collected.[71]

III. PROPOSITION 26

A. *History and Text*

In November 2010, a coalition of anti-tax activists and business groups succeeded in passing Proposition 26.[72] The measure's stated purpose was to prevent state and local elected officials from "disguis[ing] new taxes as 'fees'" in order to raise revenue "without having to abide by [Proposition 13's supermajority] voting requirements."[73] Without mentioning *Sinclair Paint* explicitly, Proposition 26's "Findings and Declaration of Purpose" asserted that "[f]ees couched as 'regulatory' but which . . . are not part of any licensing or permitting program are actually taxes[.]"[74]

Proposition 26 amended and expanded article XIII A's restrictions on new legislation. Whereas Proposition 13 had failed to define "tax," Proposition 26 provided an expansive new definition: "any levy, charge, or exaction of any kind imposed by the [s]tate" now constitutes a tax.[75] From this broad definition Proposition 26 carved out five exceptions:

> (1) A charge imposed for a specific benefit conferred or privilege granted directly to the payor that is not provided to those not charged, and which does not exceed the reasonable costs to the [s]tate of conferring the benefit or granting the privilege to the payor.
>
> (2) A charge imposed for a specific government service or product provided directly to the payor that is not provided to those not charged, and which does not

70. *Id.* at 123.

71. *Cal. Ass'n of Prof'l Scientists*, 94 Cal. Rptr. at 548.

72. *California Proposition 26, Supermajority Vote to Pass New Taxes and Fees (2010)*, BALLOTOPEDIA, https://ballotpedia.org/California_Proposition_26,_Supermajority_Vote_to_Pass_New_Taxes_and_Fees_(2010) (last visited Oct. 11, 2016).

73. 2010 VOTER INFORMATION GUIDE, *supra* note 8, at 114.

74. *Id.* Proposition 26 was a rhetorical echo of an earlier unsuccessful ballot initiative, Proposition 37. That initiative, which appeared on the November 2000 ballot, explicitly sought to overturn the decision in *Sinclair Paint*. CAL. SEC. OF STATE, CALIFORNIA VOTER INFORMATION GUIDE FOR 2000, GENERAL ELECTION 70 (2000). Proposition 37's "Findings and Declaration of Purpose" asserted that *Sinclair Paint* had "unreasonably broaden[ed] the purposes for which fees can be imposed" and "encourage[d] the use of fees to avoid the vote requirements of [a]rticles XIII A and C." *Id.* Accordingly, Proposition 37 sought to enshrine in the California Constitution the regulatory fee definition that the *Sinclair Paint* court rejected. *Id.* Specifically, Proposition 37 would have amended article XIII A, section 3 by defining as a tax "compulsory fees . . . to . . . mitigate the societal or economic effects of an activity" that "impose no significant regulatory obligation on the fee payor's activity other than the payment of the fee." *Id.* Proposition 37 was defeated on November 7, 2000, 52% to 48%. *California Proposition 37*, *Defining Fees as Taxes (2000)*, BALLOTOPEDIA, https://ballotpedia.org/California_Proposition_37,_Defining_Fees_as_Taxes_(2000) (last visited Oct. 11, 2016). But with the passage of Proposition 26, the defeat proved only to be a decade-long setback.

75. CAL. CONST. art. XIII A, § 3(b).

> exceed the reasonable costs to the [s]tate of providing the service or product to the payor.
>
> (3) A charge imposed for the reasonable regulatory costs to the [s]tate incident to issuing licenses and permits, performing investigations, inspections, and audits, enforcing agricultural marketing orders, and the administrative enforcement and adjudication thereof.
>
> (4) A charge imposed for entrance to or use of state property, or the purchase, rental, or lease of state property, except charges governed by Section 15 of Article XI.
>
> (5) A fine, penalty, or other monetary charge imposed by the judicial branch of government or the [s]tate, as a result of a violation of law.[76]

In addition to creating a broad definition of taxes, Proposition 26 also changed the application of the legislative supermajority requirement. Whereas Proposition 13 imposed supermajority requirements on "taxes enacted for the purpose of increasing revenues,"[77] Proposition 26 amended this language to require a bicameral supermajority vote for "[a]ny change in state statute which results in any taxpayer paying a higher tax."[78] As a result, Proposition 26 sweeps more broadly than Proposition 13 because Proposition 13 had been construed to allow the legislature to enact new taxes by a simple majority vote, so long as those taxes were offset by an equal or greater cut elsewhere in the tax code.[79] By extending the supermajority requirement to any change in statute that "results in *any taxpayer paying a higher tax*," Proposition 26 holds revenue-neutral taxes to the same standards as revenue-generating measures, restricting the legislature's ability to reallocate burdens under the tax code.[80]

B. Application to Rulemakings Based on Pre-2010 Statutory Authority

Although Proposition 26 establishes a broad definition tax and requires a supermajority for legislative changes resulting in any taxpayer facing a higher tax, California courts have found that it does not apply to changes in regulations issued under existing statutory authority. Proposition 26 itself says nothing about charges imposed by administrative rulemaking under existing statutes. The two appellate courts that have considered the issue both read an implied negative into Proposition 26, however, holding that its supermajority requirements apply *only* to taxes that are levied pursuant to a change in statute—and not to changes in administrative regulations.[81]

76. *Id.* § 3(b)(1)-(5).

77. Schmeer v. Cnty. of L.A., 153 Cal. Rptr. 3d 352, 366 (Ct. App. 2013) (discussing the significance of the "any taxpayer paying a higher tax" language in article XIII A, section 3(a)). *Schmeer* is discussed at length *infra* Section V(B)(2).

78. CAL. CONST. art. XIII A, § 3(a).

79. *Id.*

80. *Id.*

81. Southern Cal. Edison Co. v. Pub. Utils. Comm'n, 173 Cal. Rptr. 3d 120, 141 (Ct. App. 2014) (holding that Proposition 26's supermajority requirements did not apply to an agency-enacted fee because Proposition 26 "[b]y its terms . . . applies only to a *change in state statute* which results in any taxpayer paying a higher tax not to an agency's decision to modify an administrative rule") (emphasis in original); *accord* Cal. Bldg. Indus. Ass'n

This interpretation follows directly from the text of Proposition 26. At first blush, Proposition 26's broad definition of tax as "any levy, charge, or exaction of any kind" would seem to encompass all charges imposed by agency regulation. However, the phrase "any levy, charge, or exaction of any kind" appears in article XIII A, section 3(b), a subdivision that is merely definitional and contains no triggering provision. So while charges levied by administrative agencies might constitute taxes under this definition, Proposition 26's two-third supermajority requirements nevertheless apply only when agencies levy those charges pursuant to a "change in state statute."[82]

Having found that Proposition 26 does not apply to new regulations enacted under old statutes, California courts must still evaluate whether agency-levied charges constitute taxes or fees. Ironically, because the text of Proposition 26 does not speak to this question, at least one court has applied judicial precedent established under Proposition 13, including *Sinclair Paint*'s regulatory fee doctrine.

In *Southern California Edison v. Public Utilities Commission*, the California Court of Appeal considered whether a charge levied by the California Public Utilities Commission (CPUC) pursuant to its authority under pre-2010 laws constituted an impermissible tax.[83] At issue in *Southern California Edison* was the CPUC's Electric Power Investment Charge (EPIC), an electric bill surcharge collected to fund research on renewable energy, development, and demonstration projects.[84] In levying this charge, the CPUC relied on its authority under article XII of the California Constitution and other pre-existing sections of the California Public Utilities Code.[85] Because the charge was not imposed by a "change in statute," the court held that Proposition 26's supermajority requirements were inapposite.[86] Nevertheless, Southern California Edison maintained that the challenged fee could not be upheld as a *Sinclair Paint*-type regulatory fee because Proposition 26 was enacted to overturn *Sinclair Paint*.[87] In rejecting this argument, the court noted that the language in subdivision (d) came almost verbatim from *San Diego Gas & Electric Co. v. San Diego County Air Pollution Control District*,[88] a 1988 decision by the California Court of Appeal that was quoted extensively in *Sinclair Paint*.[89] According to the *Southern California Edison* court, by using the language of an influential 1988 decision, subdivision (d) affirmed the ongoing vitality of Proposition 13 tax/fee case law, and "except[ed] from the ambit

v. State Water Res. Control Bd., 186 Cal. Rptr. 3d 212, 216 (Ct. App. 2015), *review granted and opinion superseded*, 352 P.3d 418 (Cal. 2015) (mem.). These narrow interpretations of Proposition 26's supermajority requirements are in line with the California Supreme Court's jurisprudence on Proposition 13.

82. CAL. CONST. art. XIII A, § 3(a)-(b).

83. *S. Cal. Edison*, 173 Cal. Rptr. 3d at 125.

84. *Id.*

85. *Id.* at 127.

86. *Id.* at 140-41.

87. *Id.* at 140.

88. 250 Cal. Rptr. 420, 428 (Ct. App. 1988).

89. *S. Cal. Edison*, 173 Cal. Rptr. 3d at 141.

of 'tax'" the previously recognized categories of fees, including regulatory mitigation fees.[90] Thus, the court found that the CPUC could carry its burden by producing evidence demonstrating that the disputed charge was a valid *Sinclair Paint*-type regulatory mitigation fee.[91]

In effect, the *Southern California Edison* court read Proposition 26 as augmenting, but not entirely supplanting, the earlier judicially determined definitions of taxes and fees that arose in cases concerning Proposition 13. By this reading of the law, Proposition 26's more expansive definition of "tax" governs where charges are levied pursuant to a change in statute occurring after 2010, but Proposition 13 case law governs where agencies levy charges pursuant to statutes passed before 2010.

Under *Southern California Edison*, Proposition 13 and Proposition 26 form a bifurcated legal standard: charges levied by the government pursuant to statutes passed after 2010 are subject to Proposition 26's more stringent definition of tax, while charges levied pursuant to statutes enacted before 2010 are subject to the more lenient Proposition 13 line of tax/fee case law, including the *Sinclair Paint* doctrine on regulatory fees. Thus, while Proposition 26 prevents simple legislative majorities from enacting new regulatory mitigation fees, it does nothing to alter the authority of regulatory agencies to adopt such fees based on pre-2010 statutory authority.

IV. CALIFORNIA'S CARBON MARKET

California has a complex, interlocking set of laws and regulations aimed at reducing the state's greenhouse gas emissions.[92] The most famous such law is the Global Warming Solutions Act of 2006, commonly referred to as AB 32. A model of legislative economy at just over twelve pages, AB 32 established a legally binding commitment to reduce statewide greenhouse gas emissions to 1990 levels by 2020, and delegated to the California Air Resources Board (CARB) broad authority to fill in the details.[93] Most importantly, AB 32 empowered CARB to adopt "greenhouse gas emission limits and emission reduction measures by regulation to achieve the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions."[94] CARB's regulatory authority includes the power to "establish[] a system of market-based declining annual aggregate emission limits for sources or categories of sources that emit greenhouse gas emissions, applicable from January 1, 2012, to December 31, 2020, inclusive."[95] Pursuant to this authority, CARB began in early 2009 to develop regulations for a GHG cap-and-

90. *Id.* at 140.

91. *Id.* at 142.

92. For a list of major climate laws, see State of Cal., *California Climate Change Legislation*, CAL. CLIMATE CHANGE, http://www.climatechange.ca.gov/state/legislation.html (last visited Oct. 11, 2016); *see also* Michael Wara, *California's Energy and Climate Policy: A Full Plate, but Perhaps not a Full Model*, 70(5) BULL. ATOMIC SCIENTISTS 26, 28-31 (2014) (discussing the relationship between cap-and-trade and California's other major climate laws).

93. AB 32 added division 25.5 to CAL. HEALTH & SAFETY CODE §§ 38550-38599.

94. *Id.* § 38562(a).

95. *Id.* § 38562(c).

trade program.[96] Two and a half years later, CARB approved a set of final regulations and California's cap-and-trade program officially launched in 2012.[97]

A. *CARB's Cap-and-Trade Allowance Auctions*

As of 2015, California's cap-and-trade program covered approximately 85% of statewide greenhouse gas emissions.[98] Major emitting sectors regulated under the program include natural gas and electric utilities, transportation fuel suppliers, and large industrial facilities.[99] Entities subject to the cap-and-trade regulation must periodically submit to CARB a tradable compliance instrument for each metric ton of CO_2-equivalent[100] that they emit.[101] Compliance instruments include "allowances" (with the total number of allowances equal to the market-wide cap on greenhouse gas emissions) and "offset credits" (which reflect emission reductions generated outside of the cap-and-trade system pursuant to a CARB-approved offset protocol); allowances and offsets may be issued by CARB or another emissions trading scheme with which California's program has been formally linked.[102] Once in circulation, compliance instruments can be freely traded until they are surrendered to CARB to satisfy a regulated entity's obligation to cover its greenhouse gas emissions.[103]

We focus here on a simplified analysis of California allowances, leaving aside the nuances of carbon offsets[104] and the bilateral cap-and-trade market link

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96. *See* CAL. AIR RES. BOARD, CLIMATE CHANGE SCOPING PLAN AND IMPLEMENTATION UPDATE 15-19 (2009), http://www.arb.ca.gov/board/books/2009/062509/09-6-2pres.pdf (discussing cap-and-trade planning activities commencing in February of 2009).

97. California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms, CAL. CODE REGS. tit. 17, §§ 95801-96022 (2016).

98. CALIFORNIA AIR RES. BD., OVERVIEW OF ARB EMISSIONS TRADING PROGRAM 1 (2015), http://www.arb.ca.gov/cc/capandtrade/guidance/cap_trade_overview.pdf.

99. *Id.*; *see also* CAL. AIR RES. BD., FIRST UPDATE TO THE CLIMATE CHANGE SCOPING PLAN: BUILDING ON THE FRAMEWORK 86-88 (2014) [hereinafter 2014 SCOPING PLAN UPDATE].

100. Carbon dioxide-equivalent (CO_2e) expresses the climate impact of different greenhouse gases in terms of the amount of CO_2 that would create the same amount of warming. *See* Gunnar Myhre et al., *Anthropogenic and Radiative Forcing*, *in* CLIMATE CHANGE 2013: THE PHYSICAL SCIENCE BASIS 659, 710-11 (T.F. Stocker et al. eds., Cambridge Univ. Press 2013). Policymakers typically adopt the Global Warming Potential (GWP) method for calculating CO_2e. See *Id.* at 710-12 (reviewing the GWP concept). California uses 100-year GWPs to convert non-CO_2 gases into their CO_2-equivalents, based on GWPs as reported from the 1995 Intergovernmental Panel on Climate Change (IPCC) assessment report. CAL. CODE REGS. tit. 17, § 95802(a)(56) (2016) (defining CO_2e as calculated by the mandatory greenhouse gas reporting regulations); *Id.* § 95102(a)(66) (defining GWPs according to the values used by the U.S. Environmental Protection Agency); 40 C.F.R. pt. 98 tbl.A-1 (2016) (listing GWPs from the IPCC's 1995 assessment report).

101. CAL. CODE REGS. tit. 17, § 95802(a)(9).

102. *Id.* § 95802(a)(69) (defining compliance instruments); *see also* Cullenward, *supra* note 21, at 8-10 (reviewing the legal requirements CARB must follow in order to link its cap-and-trade program with a similar program in another jurisdiction).

103. Compliance instruments are generally fungible, but certain transactions and aggregate instrument holdings are subject to detailed restrictions. *See* CAL. CODE REGS. tit. 17, §§ 95921-95923.

104. For more on carbon offsets, see Barbara Haya et al., *Carbon Offsets in California: Science in the Policy Development Process*, *in* COMMUNICATING CLIMATE-CHANGE AND NATURAL HAZARD RISK AND CULTIVATING RESILIENCE 241 (J.L. Drake et al. eds., Springer Int'l Publ'g 2016).

with Québec[105] because the government-sponsored auctions of California government-owned allowances raise the primary legal issues under Propositions 13 and 26. California allowances enter circulation in one of three ways—CARB: (1) freely allocates some allowances to certain regulated entities;[106] (2) sells consignment allowances on behalf of utilities and their ratepayers;[107] or (3) sells government-owned allowances to the public at quarterly auctions.[108] Not all regulated entities receive a free allocation of allowances; for those that do, the quantity of freely allocated allowances is scheduled to decline over time.[109] In addition, the government collects no money from freely allocated allowances because revenue from the sale of consignment allowances is returned to utility ratepayers.[110] Thus, only the sale of government-owned allowances leads to government revenue collection.

CARB's allowance auctions follow a sealed-bid, single-round, single-clearing-price format.[111] Participants submit confidential bids, specifying how many allowances they wish to purchase at a given price.[112] A rational firm will reduce

105. California's cap-and-trade program is linked to a similar, albeit much smaller cap-and-trade program in Québec. Californian and Québécois compliance instruments are generally fungible, such that a regulated entity in California can use Québécois compliance instruments. The two jurisdictions' allowances are now jointly auctioned. CAL. CODE REGS. tit. 17, § 95943(a) (2016). For more on the cap-and-trade program's linkages with Quebec, *see generally* Cullenward, *supra* note 21.

106. CARB justifies its practice of freely allocating allowances in two ways. First, it argues that regulated industrial entities require some form of "transition assistance" "to avoid sudden or undue short-term economic impacts and promote a transition to a low-carbon economy." CAL. AIR RES. BD., PROPOSED REGULATIONS TO IMPLEMENT THE CALIFORNIA CAP-AND-TRADE PROGRAM: STAFF REPORT, INITIAL STATEMENT OF REASONS at II-26 (2010), http://www.arb.ca.gov/regact/2010/capandtrade10/capisor.pdf [hereinafter 2010 ISOR]. According to CARB, the need for transition assistance will decline over time "as covered entities gradually adjust to the carbon price and adopt energy- and carbon-saving strategies." *Id.* Second, CARB justifies the free allocation of allowances by the need to prevent leakage:

> If not appropriately compensated for in the design of the program, requirements for some energy-intensive trade-exposed (EITE) industries to reduce emissions in California . . . have the potential to create a disadvantage for California facilities relative to out-of-state competitors who do not face similar requirements. If production shifts outside of California to a region not subject to GHG emissions-reduction requirements, emissions could remain unchanged or even increase. This is referred to as emissions "leakage."

Id. Unlike transition assistance, the need for leakage prevention will not dissipate over time. Id. Thus, EITE industries will continue to receive a free allocation of allowances through 2020. *Id.*

107. CAL. CODE REGS. tit. 17, § 95910(d) (2016) (describing the rules governing sale of consigned allowances); *id.* § 94910(d)(1) (limiting consignment only to those allowances transferred from "limited use holding account"); *Id.* § 95808(a) (limiting eligibility for a limited use holding account to entities that receive free allocation of allowances under section 95890(b) of the market regulations); *Id.* § 95890(b) (limiting eligibility for direct allocation under this provision to electric utilities); *Id.* § 95892(a) (requiring that allowances freely allocated to utilities must be "used exclusively for the benefit of retail ratepayers").

108. *Auction Information*, CAL. AIR RES. BD., http://www.arb.ca.gov/cc/capandtrade/auction/auction.htm (last updated Oct. 7, 2016) (summarizing auction bids and clearing prices in quarterly allowance auctions).

109. CAL. CODE REGS. tit. 17, § 95870 tbl.8-1 (2016) (for qualified industrial companies); *Id.* § 95852 tbl.9-3 (for electric utility companies); *id*. § 95893 (for natural gas distribution companies).

110. *Id.* § 95892(a).

111. *Id.* § 95911(a).

112. Allowances are sold in thousand-unit bundles; thus bids are submitted for multiples of 1,000. *Id.* § 95911(e). Participants can submit multiple bids, subject only to the constraint that they prove to CARB that they can pay for the allowances if their bids succeed. *Id.*

emissions until doing so becomes more expensive than purchasing allowances (either directly from government auctions or from secondary market trading); economic theory therefore posits that a firm's highest bid will approximate its marginal cost of emissions abatement. Auctions are settled in a single round of bidding, with CARB awarding allowances to bidders with the highest bid, and working backwards to lower and lower bids until all allowances are awarded.[113] The auction clears at the lowest successful bid price and all participants submitting successful bids receive allowances at this price.[114] Thus, all else equal, under CARB's auction design, the clearing price should reflect the lowest marginal cost of abatement among the firms submitting successful bids.

Auction bids are the not the sole determinant of the auction clearing price, however, because CARB's allowance auctions are also subject to a price floor.[115] CARB will not accept bids that are below the price floor,[116] which began at $10 per allowance in 2012 and escalates annually through 2020 in tandem with the consumer price index (CPI) plus five percent.[117] As shown in Table 1, while the first three auctions in 2013 cleared at prices significantly above the price floor, no auction since 2013 has cleared at more than 5% above the price floor and the majority of post-2013 auctions have cleared within 1% of the price floor. At the February 2016 auction, available current-year allowances went unsold for the first time in the program's history, and the auction cleared exactly at the price floor.[118] These results indicate that the price floor has determined auction-clearing prices, as opposed to the marginal cost of abatement across regulated entities.[119] To the extent that CARB's price floor determines auction-clearing prices, the practical economic effect of the state's allowance auction resembles an annually escalating carbon tax.[120]

Auctions that clear at or around the price floor indicate slack demand for allowances. There are at least three reasons why demand has been low in the California carbon market.[121] The first has to do with the relationship between cap-and-trade and other state climate policies. The second stems from rules that allow

113. *Id.*

114. *Id.*

115. *Id.* § 95911(b)-(c).

116. *Id.* § 95911(b).

117. *Id.* § 95911(c).

118. CALIFORNIA AIR RES. BD., FEBRUARY 2016 JOINT AUCTION REPORT #6, SUMMARY RESULTS REPORT at 3 (2016), https://www.arb.ca.gov/cc/capandtrade/auction/feb-2016/summary_results_report.pdf.

119. CARB's allowance auctions are not subject to a corresponding price ceiling, but if auction clearing prices exceed predetermined thresholds, then CARB will release addition allowances for sale at fixed prices from an allowance price containment reserve. CAL. CODE REGS. tit. 17, § 95913(f) (2016). The auction clearing price threshold that triggers a sale of allowances from the price containment reserve was $40 in 2012. *Id.* This trigger price increases by 5% above CPI for each year thereafter. *Id.* If auction clearing prices trigger a sale from the price containment reserve, then CARB will sell allowances in three fixed-price tranches. *Id.* The tranches were $40, $45, and $50 in 2012. As with the trigger price, these amounts increase annually at 5% above CPI. *Id.*

120. Here we use the term "tax" for its economic meaning, not for the purposes of analyzing the policy under Proposition 13. For a discussion of how a carbon market with a price floor resembles a tax when the market clears at the price floor, see Lawrence H. Goulder & Andrew R. Schein, *Carbon Taxes Versus Cap and Trade: A Critical Review,* 4 CLIMATE CHANGE ECON. 1350010, 1350010-3 (2013).

121. *See generally* Danny Cullenward & Andy Coghlan, *Structural Oversupply and Credibility in California's Carbon Market*, 29 ELECTRICITY J. 7 (2016).

regulated utilities to reduce their emissions at minimal cost by engaging in a practice known as resource shuffling. Finally, the third reflects uncertainty over the post-2020 future of the market; if allowance supply is expected to exceed demand through 2020, then auction prices should fall below the price floor in the absence of a legally credible post-2020 plan.[122] We briefly review the first two factors below; Section V reviews the third factor in detail.

Table 1: California Allowance Auction Data

Year	Price floor[123]	Auction	Price (\$/tCO_2e)[124]	% Above price floor
2012	$10.00	Q4	$10.09	1%
2013	$10.71	Q1	$13.62	27%
		Q2	$14.00	31%
		Q3	$12.22	14%
		Q4	$11.48	7%
2014	$11.34	Q1	$11.48	1%
		Q2	$11.48	1%
		Q3	$11.50	1%
		Q4	$11.50	1%
2015	$12.10	Q1	$12.21	1%
		Q2	$12.29	2%
		Q3	$12.52	3%
		Q4	$12.73	5%
2016	$12.73	Q1	$12.73	0%
		Q2	$12.73	0%
		Q3	$12.73	0%

122. *Id.* at 14 (discussing the role that banking surplus pre-2020 allowances would have on post-2020 compliance); CAL. CODE. REGS. tit. 17, § 95922 (2016) (allowance regulated entities in California's carbon market to bank allowances for use in future compliance periods).

123. CAL. CODE REGS. tit. 17, § 95911(c).

124. CAL. AIR RES. BD., CALIFORNIA CAP-AND-TRADE PROGRAM SUMMARY OF AUCTION SETTLEMENT PRICES AND RESULTS, http://www.arb.ca.gov/cc/capandtrade/auction/results_summary.pdf (Aug. 2016) [hereinafter SUMMARY OF AUCTION SETTLEMENT PRICES AND RESULTS]. Prices shown here are for current year vintage allowances; some minor differences between current and future year vintage prices exist. For comparison, in November 2015, tradable permits in the European Union's Emissions Trading Scheme, the largest cap-and-trade program in the world, sold for € 8.51/tCO_2 (\$9.06/tCO_2). *EU Emissions Allowances*, EUROPEAN ENERGY EXCH., https://www.eex.com/en/market-data/emission-allowances/spot-market/european-emission-allowances#!/2015/11/20 (last visited Nov. 20, 2015). Permits in the second largest U.S. cap-and-trade program, the Regional Greenhouse Gas Initiative (RGGI), sold for \$7.50/tCO_2 as of December 2015. REG'L GREENHOUSE GAS INITIATIVE, AUCTION RESULTS https://www.rggi.org/market/co2_auctions/results (last visited Dec. 31, 2015). These prices are well below the U.S. federal government's central estimate of the marginal social benefit of avoiding a ton of GHG emission, which an inter-agency working group estimated at \$42/tCO_2e. INTERAGENCY WORKING GRP. ON SOC. COST OF CARBON, TECHNICAL SUPPORT DOCUMENT: TECHNICAL UPDATE OF THE

Although the cap-and-trade program is perhaps the best known of California's climate policies, the state employs an all-of-the-above approach to climate policy. The cap-and-trade program operates alongside several major non-market-based policies that also reduce greenhouse gas emissions. Many of these non-market-based measures pre-dated the launch of cap-and-trade and remained in place after cap-and-trade's launch.[125] CARB refers collectively to the state's non-cap-and-trade climate laws as "complementary measures."[126] This is convenient but somewhat misleading shorthand. The label implies a supporting role for non-cap-and-trade regulatory efforts. By CARB's own reckoning, however, complementary measures are expected to deliver 71% of the abatement necessary to comply with AB 32's 2020 emissions target, leaving cap-and-trade to drive only 29% of abatement.[127] As Professor Michael Wara put it, "[t]o a significant degree, cap-and-trade is a market-based 'dessert' that follows a multi-course menu of other regulatory initiatives aimed at cutting emissions."[128] As a result, allowance auctions only price the residual abatement requirements that are left over after the complementary policies take effect—and not the cost of the full suite of California's climate policies.[129]

The "complementary measures" label is also misleading because it implies that cap-and-trade works in sync with California's other climate policies. In fact, some of California's other climate laws work at cross-purposes with the economic

SOCIAL COST OF CARBON FOR REGULATORY IMPACT ANALYSIS UNDER EXECUTIVE ORDER 12866 (2015), https://www.whitehouse.gov/sites/default/files/omb/inforeg/scc-tsd-final-july-2015.pdf. The highest carbon prices in the world have been imposed through carbon taxes: Sweden's carbon tax was \$130/tCO_2, followed by Finland (\$64/tCO_2), Switzerland (\$62/tCO_2), Norway (\$52/tCO_2), Denmark (\$25/tCO_2), British Columbia (\$23/tCO_2), Ireland (\$22/tCO_2), Slovenia (\$19/tCO_2), and France (\$16/tCO_2). KOSSOY ET AL., *supra* note 14 at 23.

125. For instance, in 2002, the California legislature enacted AB 1493, requiring CARB to "develop and adopt regulations that achieve the maximum feasible and cost-effective reduction of greenhouse gas emissions from motor vehicles." CAL. HEALTH & SAFETY CODE § 43018.5 (West 2016). Also in 2002, the legislature passed SB 1078, creating California's first Renewable Portfolio Standard (RPS), which required the state's electric utilities to procure 20% of their electricity from renewable sources by 2017. CAL. PUB. UTIL. CODE § 399.15 (West 2016). In 2007, the governor issued Executive Order S-01-07, directing CARB to adopt regulations to reduce by 10% the average GHG emissions attributable to California's transportation fuel market. Cal. Governor Arnold Schwarzenegger, Executive Order No. S-01-07 (Jan. 18, 2007), https://www.gov.ca.gov/news.php?id=5172. Finally, California has had stringent building and appliance energy efficiency standards in place since the 1970s. *See generally* CAL. CODE REGS. tit. 20, §§ 1601-1609 (2016) (appliance efficiency standards); CAL. CODE REGS. tit. 24, §§ 100.0-150.2 (2016) (building efficiency standards). While not originally adopted in order to reduce GHG emissions, California's energy efficiency codes have become an important part of the state's GHG abatement strategy. *See generally* CAL. AIR RES. BD., CLIMATE CHANGE SCOPING PLAN, A FRAMEWORK FOR CHANGE at ES-3 (2008) [hereinafter 2008 SCOPING PLAN] ("Key elements of California's recommendations for reducing its greenhouse gas emissions to 1990 levels by 2020 . . . include. . . [e]xpanding and strengthening existing . . . building and appliance standards[.]"). When cap-and-trade launched, the state left in place its pre-existing climate policy regime, thereby creating a hybrid system of market-based and non-market-based climate regulations.

126. *See, e.g.*, 2008 SCOPING PLAN, *supra* note 125, at 17 (listing anticipated complementary measures and the estimated abatement from each).

127. 2014 SCOPING PLAN UPDATE, *supra* note 99, at 93.

128. Wara, *supra* note 92, at 26.

129. *See generally Id.*

efficiency rationale that is often invoked to support cap-and-trade.[130] In theory, a properly functioning cap-and-trade system will drive regulated parties to undertake least-cost abatement measures, thereby reducing pollution to target levels while minimizing total costs. However, some—though not all—complementary measures prevent the achievement of this outcome by forcing regulated entities to undertake high-cost abatement measures.[131] Although such measures may well be justifiable on other political or policy grounds,[132] they undermine the cost-effectiveness rationale of a pure cap-and-trade system.

As a result, the full cost of California's climate policy portfolio is significantly higher than the carbon market price. Even as complementary measures raise overall compliance costs, they simultaneously depress demand for allowances, pushing auction-clearing prices (as well as secondary market trading prices) toward the price floor. The concept is best illustrated by example. Consider the state's electric utilities, which are subject to the cap-and-trade program and to the Renewable Portfolio Standard (RPS), a law that requires them to obtain a certain percentage of their electricity from renewable sources.[133] By complying with the RPS, utilities significantly reduce their GHG emissions.[134] But with fewer emissions, utilities require fewer allowances to comply with the state's cap-and-trade program. Utilities therefore submit bids at auction for lower volumes of allowances, reducing demand and therefore market prices. The end result is that auction clearing prices do not reflect regulated firms' full marginal cost of GHG abate-

130. *See generally* Ann Carlson, *Designing Effective Climate Policy: Cap-and-Trade and Complementary Policies*, 49 HARV. J. ON LEGIS. 207 (2012) (discussing the tension between climate policy instruments in California). As Professor Carlson notes, under certain circumstances, non-market-based regulations can be excellent complements to cap-and-trade systems: "if systematic market failures prevent emitters subject to a cap-and-trade system from choosing the lowest cost compliance options, then . . . complementary policies to correct the market failure make sense." *Id.* at 207. Professor Carlson identifies energy efficiency standards as one type of regulation that corrects such a market failure. *Id.*

131. For example, California's Renewable Portfolio Standard (RPS) requires the state's utility companies to acquire a fixed percentage of their electricity from renewable sources. Procuring wind or solar power is a particularly expensive way to reduce GHG. CARB estimates the GHG-abatement cost of the RPS around $110 per ton, or about 10 times the current going price for a permit in the state's cap-and-trade program. *See* 2010 ISOR, *supra* note 106, at V-12 fig.V-3.

132. Some political scientists and legal scholars observe that RPSs and other sector-specific "green industrial policies" concentrate policy benefits among a handful of actors (e.g., renewable energy project developers in the case of an RPS). Jonas Meckling et al., *Winning Coalitions for Climate Policy*, 349 SCIENCE 1170, 1170-71 (2015). According to Meckling et al., the beneficiaries of green industrial policies form effective "coalitions for decarbonization" and advocate for additional climate policies, including market-based policies like cap-and-trade, which impose a carbon price on emitters. *Id.* In other words, according to the authors "[c]arrots buy sticks." *Id.* at 1170. Because market-based climate policies rarely succeed in the absence of green industrial policies, Meckling et al. propose that policymakers strategically implement green industrial policies to create a political constituency that favors broader, price-based regulation. *Id.* at 1171. By this argument, noting that complementary measures sometimes work at cross purposes with cap-and-trade obscures an important point: without first adopting complementary measures, California might never have adopted cap-and-trade in the first place.

133. CAL. PUB. RES. CODE § 25470 (West 2016).

134. CARB estimates that the RPS alone will achieve 15% of the abatement required to reduce the state's emissions to 1990 levels by 2020. *See* Wara, *supra* note 92, at 31.

ment: mitigation under the RPS imposes an implicit positive cost of CO_2 mitigation, but this mitigation is delivered to the carbon market at an effective price of $\$0/tCO_2$.[135]

Complementary measures only partially explain persistently low auction clearing prices in California. Anemic demand for allowances is also due to a practice known as resource shuffling.[136] Under CARB's cap-and-trade rules, California utilities must procure allowances for the GHG emissions associated with the production of electricity that they sell to in-state customers, including emissions associated with electricity that is generated outside California and imported into the state through the interstate transmission system.[137] When cap-and-trade launched, several California utilities held contracts for deliveries of carbon-intensive electricity from out-of-state coal plants.[138] For many of these utilities, the least cost abatement strategy was to divest these contracts and replace them with deliveries from lower-emitting resources, a practice known as "resource shuffling."[139] One result of resource shuffling is that it produces emission reductions in California by shifting liability for emissions from imported electricity to neighboring states—an outcome that defeats the underlying goal of reducing net GHG emissions into the atmosphere. To avoid this outcome, CARB initially established strict rules to prevent the state's utilities from engaging in resource shuffling.[140] But in 2013, CARB weakened its guidelines on resource shuffling, eventually codifying permissive regulatory "safe harbors" in 2014 that essentially enable utilities to resource shuffle at will.[141] Preliminary estimates of the scale of resource shuffling indicate that it could deliver emissions reductions approximately equivalent to the size of the entire carbon market's mitigation requirements (that is, what is needed to reduce covered emissions to 1990 levels, after the effect of the complementary measures are taken into account); secondary market trading and California utilities' coal contract divestments indicate that resource shuffling is already occurring.[142]

B. *California's Current Uses of Allowance Revenue*

Despite weak demand for allowances due to complementary measures and resource shuffling, the scale of California's cap-and-trade system, coupled with

135. SEVERIN BORENSTEIN ET AL., REPORT OF THE MARKET SIMULATION GROUP ON COMPETITIVE SUPPLY/DEMAND BALANCE IN THE CALIFORNIA ALLOWANCE MARKET AND THE POTENTIAL FOR MARKET MANIPULATION 14-17 (2014).

136. *See generally* Danny Cullenward, *Leakage in California's Carbon Market*, 27(9) ELEC. J. 36 (2014) [hereinafter *Leakage*] (documenting examples of resource shuffling after reforms allowed the practice); *see also* Danny Cullenward, *How California's Carbon Market Actually Works*, 70(5) BULL. ATOMIC SCIENTISTS 35, 40 (2014) [hereinafter *California's Carbon Market*] (describing the regulatory process that enabled resource shuffling); BORENSTEIN ET AL., *supra* note 135, at 17, 52-58 (finding that resource shuffling is likely to account for a significant component of overall carbon market compliance).

137. *Leakage*, *supra* note 136, at 39.

138. *Id.* at 39-42.

139. *Id.* at 37.

140. *California's Carbon Market*, *supra* note 136, at 38-39.

141. *Id.* at 39-40.

142. *Leakage*, *supra* note 136, at 42.

CARB's price floor, ensures that allowance auctions generate significant government revenue from the sale of government-owned allowances.[143] To date, CARB has generated over $4 billion in revenue through the auction of allowances.[144] Auction revenue is expected to increase as the auction price floor rises at 5% above CPI each year and as CARB increases the proportion of allowances that are allocated by auction.

While AB 32 offered no guidance on the permissible uses of auction proceeds, four subsequent statutes now govern the use of allowance revenue:

- SB 1018 (2012) created a Greenhouse Gas Reduction Fund (GGRF) and directs that "all moneys collected by [CARB] from the auction or sale of allowances" be deposited in in the GGRF "and available for appropriation by the [l]egislature."[145] While providing that "[n]o moneys from the General Fund or any other fund shall be deposited in the [GGRF]," SB 1018 permits the Controller to "use the moneys in the [GGRF] for cash flow loans to the General Fund."[146]
- AB 1532 (2012) requires that "all moneys appropriated from the [GGRF] . . . further[] the regulatory purposes" of AB 32.[147] AB 1532 also directs the Department of Finance to develop three-year investment plans that identify near and long-term spending priorities thereby "facilitat[ing] achievement of cost-effective greenhouse gas emissions reductions."[148]
- SB 535 (2012) requires that the investment plans developed pursuant to AB 1532 allocate at least 25% of available moneys in the GGRF to projects that provide benefits to disadvantaged communities, and that 10% of available moneys go to projects located in "disadvantaged communities."[149]
- And finally, SB 862, the Budget Act for FY2014-15, provides for continuous appropriations of allowance revenue, beginning in FY2015-16.[150] Pursuant to SB 862, allowance revenue is now appropriated according to the following formula: 25% for the state's high-speed rail project, 20% for affordable housing and "sustainable communities grants" (with at least half of this amount for affordable housing), 10% for intercity rail capital projects, and 5%

143. No government revenue is generated from the sale of consignment allowances.

144. CAL. AIR RES. BD., AUGUST 2016 JOINT AUCTION #8, CALIFORNIA POST JOINT AUCTION PUBLIC PROCEEDS REPORT at 3 (2016), https://www.arb.ca.gov/cc/capandtrade/auction/aug-2016/ca_proceeds_report.pdf.

145. CAL. GOV. CODE § 16428.8(a)-(b) (West 2016).

146. *Id.* § 16428.8(c).

147. CAL. HEALTH & SAFETY CODE § 39712(a)(2) (West 2016).

148. *Id.* § 39716(a)(3). In addition, AB 1532 provided that "[m]oneys in the [GGRF] shall be appropriated through the annual Budget Act consistent with the investment plan." *Id.* § 39718(a).

149. *Id.* § 39713(a)-(b). SB 375 also directs the California Environmental Protection Agency to identify "disadvantaged communities . . . based on geographic, socioeconomic, public health, and environmental hazard criteria." *Id.* § 39711.

150. CAL. HEALTH & SAFETY CODE § 39719(b)(1) (West 2016).

> for low carbon transit operations.[151] The remaining 40% is available for annual appropriation by the [l]egislature.[152]

Table 2: Summary of FY2013-15 Auction Revenue Appropriations[153]

FY2013-14: $570 million in total appropriations	$500 million	One-time loan to the general fund
	$40 million	Energy and water conservation and efficiency programs
	$30 million	CARB-administered zero-emission vehicle rebates
FY2014-15: $832 million in total appropriations	$380 million	Low-carbon transportation and land-use planning initiatives
	$250 million	California high-speed rail project
	$110 million	Various energy efficiency and conservation programs
	$91 million	Water conservation, efficiency programs; recycling programs
Total (2-Year)	$1.4 billion	

Prior to the SB 862 continuous appropriations formula, all allowance revenue was spent through annual appropriations measures. Table 2 summarizes the expenditures of allowance revenue during the FY2013-14 and FY2014-15. Of particular note is the $500 million appropriation of allowance revenue in FY2013-14 for a one-time loan to the general fund. No court has yet considered the legal significance of this loan, but the use of auction proceeds for general revenue purposes cuts against the argument that California's cap-and-trade system is not a tax for the purposes of Proposition 13.[154]

151. *Id.*

152. On top of the 25 percent continuous appropriation for high-speed rail, SB 862 also provides that $400 million of the outstanding loan from the GGRF to the General Fund be repaid to the high-speed rail project. Cal. Health & Safety Code § 39719.1.

153. *Auction Proceeds Budget Appropriations*, CAL. AIR RES. BD., http://www.arb.ca.gov/cc/capand-trade/auctionproceeds/budgetappropriations.htm (last visited Nov. 13, 2015).

154. Alternatively, the *California Chamber of Commerce* court could find that the cap-and-trade program is valid as a whole, but that the loan to the general fund is invalid under Proposition 13. Of course the court could also find that the entire program is valid, including the loan to the general fund.

C. Legal Uncertainty in the Current Cap-and-Trade Program

The cap-and-trade program's enabling statute, AB 32, passed in 2006, well before Proposition 26. Therefore, under California's bifurcated tax/fee legal standard, the charges imposed by CARB's auction of allowances are subject to the more lenient Proposition 13 and *Sinclair Paint* analysis discussed above. Were a court to decide that cap-and-trade allowance auctions constituted a tax rather than a fee, however, the current cap-and-trade program would be unconstitutional under Proposition 13 because its enabling statute, AB 32, passed by a simple legislative majority.[155]

This very issue is currently before state courts. In *Morning Star Packing Company v. CARB*, a trial court held that CARB's auction of allowances was permissible under Proposition 13 because it was a regulatory mitigation fee rather than a tax, but noted that it was a "close question."[156] As of this writing, the *Morning Star* decision is on appeal before the California Court of Appeal as *California Chamber of Commerce v. CARB*.[157]

In *Morning Star*, CARB argued that allowance auctions were not taxes because (1) auction participation is not compulsory and (2) market forces set auction prices, not the government.[158] Characterizing its program as differing from taxes on these essential grounds, CARB argued that the cap-and-trade allowance auctions escaped Proposition 13's reach.[159] The court disagreed. While acknowledging that participation in allowance auctions were "in some respects" voluntary,[160] the court concluded that the only way for regulated firms to avoid allowance auctions entirely would be to stop emitting GHGs altogether.[161] Because this was not a realistic option, the court found that participation in allowance auctions was effectively compulsory.[162] Thus, "from the perspective of a covered entity, the purchase of allowances is little different from an emissions tax."[163] Similarly, the court found that while the auction prices were "determined at least in part by market forces," the auction price floor meant that "the amount charged is determined,

155. Whether the entire program would be invalid, or whether only certain individual components—such as the auction of government-owned allowances—would be invalid depends on the appellate court's reasoning, assuming it rules against CARB in the first place.

156. *Morning Star*, *supra* note 15, at *16. In *Morning Star*, the plaintiffs challenged cap-and-trade allowance auctions on two grounds. First, they argued that AB 32 did not give CARB the statutory authority to auction allowances. *Id.* at *5. Or if AB 32 did authorize allowance auctions, the plaintiffs contended that it was unconstitutional under Proposition 13. *Id.* at *5-6. Neither argument prevailed.

157. *California Chamber of Commerce*, *supra* note 19.

158. *Morning Star*, *supra* note 15, at *7.

159. *Id.*

160. *Id.* at *17

> ("[T]he purchase of allowances is, in some respects, voluntary. Because covered entities receive a significant portion of the allowances for free, covered entities have some control over when, and perhaps if, they participate in sales of allowances. Covered entities may be able to reduce their GHG emissions to reduce or completely avoid their need to purchase additional allowances. Further, covered entities are not compelled to purchase allowances from the government; they also may purchase allowances from other regulated entities.").

161. *Id.* at *16.

162. *Id.*

163. *Morning Star*, *supra* note 15, at *16.

at least in part, by government fiat."[164] Moreover, because auction prices were a function of the number of allowances that CARB released into circulation, the court found that CARB, not the invisible hand, ultimately set auction prices.[165]

Having determined that allowance auctions could not entirely escape classification as a tax, the court considered whether auctions fit within judicially recognized fee categories.[166] Acknowledging that allowance auctions did "not fit squarely within any of the recognized fee classifications,"[167] the court found that auctions were most akin to regulatory mitigation fees recognized in *Sinclair Paint*.[168] In reaching this conclusion, the court noted that allowance auctions had some characteristics of user fees[169] and development fees,[170] but that neither category accommodated the auction of government-owned allowances. Unlike development fees, allowance costs "are not imposed in return for the privilege of developing land, and the amount of the charge is not tied to the individual payer's impact on the community."[171] And unlike user fees, "the charges are not imposed to offset the cost of a government product or service."[172]

Finding that allowance auctions constitute regulatory fees for analytical purposes, the court then applied the three-prong test from *Sinclair Paint* to determine whether auctions were in fact valid:

> [T]o be a valid regulatory fee and not a tax, the following requirements must be met: (1) the primary purpose (or intended effect) of the fee must be regulation, not revenue generation; (2) the total amount of fees collected cannot exceed the costs of the regulatory activities they support; and (3) there must be a reasonable relationship between the fees charged and the regulatory burden imposed by the fee payers' products or operations.[173]

The court found that allowance auctions satisfied the first prong of the *Sinclair Paint* test for two reasons. First, the court found that the allowance auction plausibly advanced legitimate regulatory objectives that could not be achieved by means of free allowance allocation, including: "(i) increasing the cost of compliance and thereby stimulating early action to reduce emissions; (ii) equitably, transparently, and efficiently distributing allowances to new and established businesses; (iii) creating a transparent pricing signal to facilitate trading of allowances and minimize the risk of market manipulation[.]"[174] Thus, the court found that "even if selling allowances is not 'necessary' to achieve AB 32's goals, selling

164. *Id.*

165. *Id.* at *16-17.

166. *Id.* at *15.

167. *Id.*

168. *Morning Star*, *supra* note 15, at *16.

169. *Id.* at *15. As with development fees, the proceeds of allowance auctions "are used to mitigate impacts related to the fee payer's business operations." *Id.*

170. *Id.* As with user fees, "those who purchase allowances receive something that is not received by those who do not pay—a tradable right to emit GHG[s]." *Id.*

171. *Id.*

172. *Id.*

173. *Morning Star*, *supra* note 15, at *18.

174. *Id.* at *19.

allowances still may advance those goals."[175] Second, the court found that allowance auctions were regulatory in "purpose or effect" because, per AB 1532, allowance auction revenue was sequestered in the Greenhouse Gas Reduction Fund and could be used only to further the regulatory purposes of AB 32.[176]

While the trial court had relatively little trouble applying the first prong of the *Sinclair Paint* test, it struggled to analyze allowance auctions under *Sinclair Paint*'s second prong. In assessing whether allowance revenue "exceed[s] the costs of the regulatory activities they support," the court's difficulty lay in defining "the regulatory activities" that allowance auction revenues supported.[177] As the court noted, unlike other regulatory fees, allowance auctions were not intended to shift costs of administering a specific program.[178] Indeed, when AB 32 was passed, no one knew how allowance revenues would be used, or even whether CARB would enact a cap-and-trade program in the first place.[179] Moreover, at the time *Morning Star* was decided, the state had yet to appropriate any allowance revenue, leaving the parties to guess at how these funds would be spent.[180] Finally, while AB 1532 required that allowance revenue be used to further the regulatory objectives of AB 32, that language did little to cabin the potential uses of revenue. As the court put it, "since nearly every aspect of life has some impact on GHG emissions, it is difficult to conceive of a regulatory activity that will not have at least some impact on GHG emissions."[181] Nevertheless, the court dismissed these concerns, concluding that, "because the proceeds can only be used to advance the regulatory purposes of AB 32, by definition, the total amount of fees collected will not exceed the costs of the regulatory programs they support."[182]

The court again struggled in applying the third prong of the *Sinclair Paint* test. The court began its analysis by noting that there was "no clear test for determining when a fee is 'reasonably related' to the adverse effects addressed by the regulatory activities for which the fee is charged."[183] It then observed that no previous case had applied the regulatory fee framework to a market-based program like cap-and-trade:

> ARB's sales of allowances are unlike the taxes and fees that have previously come before the courts. Unlike a traditional *Sinclair*-type fee, the allowance charges are not intended to shift the costs of a particular regulatory program to those responsible for the problem that the program was created to address. Rather, the charges are a byproduct of the implementation of a regulatory program.[184]

Faced with an issue of first impression, and lacking any clear test to apply, the court essentially threw up its hands. The court noted that allowances constitute

175. *Id.*

176. *Id.*

177. *See id.* at *20 ("[T]his is an unusual case. Unlike a typical Sinclair-type regulatory fee, the charges at issue are not intended to shift the costs of any particular regulatory program or program.").

178. *Morning Star*, *supra* note 15, at *20.

179. *Id.*

180. *Id.*

181. *Id.* at *17.

182. *Id.* at *20.

183. *Morning Star*, *supra* note 15, at *20.

184. *Id.* at *21.

valuable emissions rights, that bids at auction "(presumably) will not exceed the value [that the bidders] expect to receive from those allowances," and that auction revenues must "be spent in furtherance of the goals of the regulatory program."[185] Under these "unique circumstances," the court concluded that "the amounts charged for allowances" need not "be closely linked to the payers' burdens on the specific regulatory programs that will be funded by them."[186] Rather, as the court put it: "[a]ll that is required is a reasonable relationship between the charges and the covered entities' (collective) responsibility for the harmful effects of GHG emissions. As the [s]tate's largest sources of GHG emissions, the court is persuaded that a reasonable relationship exists."[187]

The *Morning Star* decision amply demonstrates that allowance auctions fit awkwardly in the tax/fee line of cases following Proposition 13. It remains to be seen whether the Court of Appeal will join the trial court in extending *Sinclair Paint*'s regulatory mitigation fee doctrine to encompass market-based programs like cap-and-trade, but at least two facts that have emerged since the *Morning Star* decision that tend to undercut the trial court's reasoning. First, the $500 million loan in FY2013-14 from the Greenhouse Gas Reduction Fund to the General Fund weakens the state's claim that revenues will be used to further AB 32's regulatory goals, rather than for general revenue purposes. Second, while the three auctions that were held prior to the decision in *Morning Star* cleared well above the price floor, subsequent auctions held since cleared near the price floor—and exactly at the price floor in all auctions in 2016.[188] Indeed, secondary market prices actually fell below the auction price floor in mid-2016 when auctions cleared (by necessity) at the price floor.[189] These results suggest that the price floor plays a greater role in determining auction-clearing allowance prices than was apparent at time of the *Morning Star* trial court's decision, making cap-and-trade more closely resemble a tax and undercutting the trial court's presumption that auction bids "will not exceed the value [that bidders] expect to receive from those allowances."[190]

Even if auctions of government-owned allowances are upheld under Proposition 13, the state's cap-and-trade program is only authorized through 2020.[191] The next section considers the state's options for implementing post-2020 market-based climate policies to reduce emissions below 1990 levels, consistent with the restrictions in Propositions 13 and 26.

185. *Id.*

186. *Id.* at *22.

187. *Id.*

188. *See* discussion of allowance auction-clearing prices, *supra* Part IV(A).

189. Cullenward & Coghlan, *supra* note 121, at 8, 12.

190. *Morning Star*, *supra* note 15 at *21.

191. CAL. CODE REGS. tit. 17, § 95840 (2016).

V. OPTIONS FOR IMPLEMENTING POST-2020 MARKET-BASED CLIMATE POLICIES

A. The Uncertain Future of Market-Based Climate Policies in California

In 2015, Governor Brown signed Executive Order B-30-15, establishing a statewide GHG emissions reduction target of 40% below 1990 levels by 2030.[192] That measure was designed as an interim step toward the concurrently expressed goal of reducing emissions 80% below 1990 emissions levels by 2050, a target that had also been established by a 2005 Executive Order from Governor Schwarzenegger.[193] Whether and to what extent cap-and-trade will play a role in achieving these deeper targets, however, is still unclear. Measures to reduce greenhouse gas emissions are widely popular among California voters,[194] but policymakers' embrace of cap-and-trade has been tentative, as evidenced by the state's reliance on complementary measures in its pre-2020 climate policy portfolio.

The 2015 legislative session marked the first time that the legislature considered post-2020 climate policies in earnest and the results of that session suggest a preference for doubling down on non-market-based measures. In 2015, the California legislature considered two significant pieces of climate legislation, only one of which was ultimately signed into law. The successful bill was SB 350, which increased the state renewable portfolio standard to require utilities to obtain half of their electricity from renewable sources by 2030[195] and doubled energy efficiency requirements for the state's existing building stock.[196] While SB 350 succeeded, the second bill, SB 32 fell short. SB 32 was an echo of AB 32: it would have codified the governor's economy-wide 2030 emissions target, while again authorizing CARB to employ market-based policies to achieve the goal.[197] SB 32 passed the Senate but failed to achieve support in the Assembly, where Republicans and moderate Democrats objected to its delegation of broad rulemaking authority to CARB.[198] It was amended and re-introduced in the 2016 legislative session, where it passed both houses on a simple majority basis and was signed

192. Exec. Order B-30-15, *supra* note 25.

193. Cal. Gov. Arnold Schwarzenegger, Exec. Order S-3-05 (June 1, 2005), https://www.gov.ca.gov/news.php?id=1861.

194. Nearly 70% of likely Californian voters support a goal of reducing the state's greenhouse gas emissions to 80% below 1990 levels by 2050, and 63% support AB 32's goal of 1990 levels by 2020. MARK BALDASARRE ET AL., PUB. POLICY INST. CAL., CALIFORNIANS & THE ENVIRONMENT 9-10 (2015), http://www.ppic.org/content/pubs/survey/S_715MBS.pdf.

195. S.B. 350, Reg. Sess. (Cal. 2015). SB 350 increased the state's Renewable Portfolio Standard (RPS), which previously required California utilities to acquire 33% of the electricity from renewable sources by 2020. CAL. PUB. UTIL. CODE §§ 399.15(b)(2)(b), 399.30(b)(2) (West 2016).

196. As originally drafted, SB 350 would have also mandated a 50% reduction in petroleum consumption by 2030, but opponents of this provision successfully advocated for its removal in the final bill. Debra Kahn, *Brown, Lawmakers Bow to Political Pressure, Remove Petroleum Mandate in Climate Bill*, CLIMATEWIRE (Sept. 10, 2015), http://www.eenews.net/stories/1060024479.

197. S.B. 32, Reg. Sess. (Cal. 2015).

198. *See* Kahn, *supra* note 196, at 1-2.

into law by Governor Brown on September 8, 2016.[199] However, the bill's language addressing the use of market-based mechanisms after 2020 was removed. In the end, SB 32 contained only a brief statement of legislative intent and a single line codifying the new 2030 statewide climate target of reducing greenhouse gas emissions 40% below their 1990 levels.[200]

Whether or not policymakers are inclined to enact new market-based climate based policies, Proposition 26 discourages them from doing so. Because Proposition 26's legislative supermajority requirement applies only to measures that impose a tax—defined as "any levy, charge, or exaction of any kind imposed by the [s]tate"[201]—it enables a simple legislative majority to authorize command-and-control measures that force regulated entities to adopt specific technologies or achieve performance targets, but do not otherwise impose any levies, charges, or exactions. Thus, because SB 32 was passed by a simple legislative majority, it can and does authorize CARB to develop regulations to achieve the statewide 2030 climate target. SB 32 cannot, however, expand or extend CARB's authority to enact policies that constitute a "tax" under Proposition 26's broad definition because it was not passed by a supermajority.[202]

Proposition 26 stacks the deck against market-based policies, which regulate by means of a price signal and therefore generally entail levies, charges, or exactions.[203] Should California policymakers wish to extend the carbon market or otherwise harness market-based policies to support the state's 2030 and 2050 climate targets, they will need to carefully tailor their strategies to the constraints imposed by Propositions 13 and 26. Here, we review two sets of options: those that involve new legislative authority, and those that consider new regulations issued under existing statutory authority.

B. Legislative Options

1. Enact New Enabling Legislation by a Supermajority Vote

As an initial matter, we note that Proposition 26 effectively bars a simple legislative majority from authorizing a post-2020 version of the state's existing

199. SB 32, *supra* note 25. We note that the bill's effect was contingent on the simultaneous passage of another bill, AB 197, that added a series of legislative oversight processes, implementation requirements, and other reforms affecting CARB's implementation of state climate policy. *Id*. at § 3 (requiring that AB 197 become law by January 1, 2017, for SB 32 to take effect); *see also* State Air Resources Board: greenhouse gases: regulations, Assembly Bill No. 197 (Sept. 8, 2016), https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB197.

200. SB 32, *supra* note 25.

201. CAL. CONST. art. XIII A, § 3(b). While Proposition 26 provides no additional guidance on how to interpret these terms, it does place the evidentiary burden on the State to demonstrate by a preponderance of the evidence that a "levy, charge, or other exaction is not a tax." *Id.* This may reflect poor draftsmanship, as "'tax' means any levy, charge, or exaction of any kind imposed by the state." *Id.*

202. *Id*. at § 3(a) (requiring that "any change in statute which results in any taxpayer paying a higher tax must be imposed by an act passed by not less than two-thirds [of both the California Assembly and Senate]"). Any theory that relies on SB 32 to extend CARB's authority involves a "change in statute," and therefore does not satisfy Proposition 26's supermajority requirement. *Id*.

203. One notable exception is a carbon market in which there is no government revenue collection, e.g. one consisting entirely of free allocation and/or consignment allowance auctions. The legal risks of this approach under legislation authorized by a simple majority are discussed in Section V(B)(2), *infra*.

cap-and-trade program. By requiring polluters to purchase allowances, the state's current practice of auctioning government-owned allowances imposes "lev[ies], charge[s], or exaction[s]" that do not fit well within any of the five exceptions that Proposition 26 carves out from its expansive definition of tax. As a result, extending the status quo program via new legislation likely requires a legislative supermajority.

Under Proposition 26's exceptions one and two, simple legislative majorities can impose charges "for a specific benefit conferred or privilege granted,"[204] or "for a specific government service or product,"[205] but only if two conditions are satisfied. First, the benefit, service, privilege, or product in question must be granted or provided "directly to the payor" and "not provided to those not charged."[206] Second, the amount collected cannot exceed "the reasonable costs to the [s]tate of conferring the benefit[,] granting the privilege[, or] providing the service."[207] Exceptions 1 and 2 closely correspond to the judicial definitions of special assessments, user fees, and development fees, all of which confer a benefit, privilege, or service exclusively on the fee payers.[208] By contrast, cap-and-trade auctions do not provide a government service to auction participants. While one might argue that successful auction bidders receive the privilege of emitting GHGs, the last sentences in exceptions one and two likely foreclose this argument. To fit within exception one or two, a fee cannot "exceed the reasonable costs to the [s]tate *of conferring the benefit or granting the privilege (or providing the service)* to the payor" (emphasis added).[209] This language effectively bars programs like cap-and-trade allowance auctions that, by design, generate revenue in excess of administrative costs.[210]

204. CAL. CONST. art. XIII A, § 3(b)(1).

205. *Id.* § 3(b)(2).

206. *Id*. § 3(b)(1)-(2).

207. *Id.*

208. *See supra* Part II(A).

209. CAL. CONST. art. XIII A, § 3(b)(1)-(2).

210. We are grateful to an anonymous reviewer for pointing out that one can argue that these exceptions are not limited to administrative costs only. Under an alternative theory, one could observe that greenhouse gas emissions cause negative impacts to the State. Because entities covered by the cap-and-trade program must hold sufficient allowances to cover their emissions, one could argue that in selling a government-owned allowance, the State is merely recouping the "reasonable costs" to the State of "granting the [payor's] privilege" to emit greenhouse gases. Such a theory requires an estimate of the costs of climate impacts to the State on a dollar per ton basis that exceeds the price obtained at auction. However, California does not have an official estimate of these impacts. The federal government's Social Cost of Carbon (SCC) is $42/tCO_2$ emitted in 2020 (in 2007 USD at 3% discount rate). INTERAGENCY WORKING GRP. ON SOC. COST OF CARBON, *supra* note 124, at 3 (2015). Although $42/tCO_2$ is greater than the current California market price of $12-13/tCO_2e$, the federal SCC is based on an estimate of global damages—that is, the cost of climate impacts across the entire planet, not just in the United States or in California alone. *Id*. at 14. California's share of total global damages as estimated by the models used in the SCC would be much smaller than $42/tCO_2$; indeed, the models do not have sufficient resolution at this geographic scale. NAT'L ACADS. OF SCIS., ENG'G, & MED., ASSESSMENT OF APPROACHES TO UPDATING THE SOCIAL COST OF CARBON: PHASE 1 REPORT ON A NEAR-TERM UPDATE 1, 9-12 (2016) (describing the limited geographic resolution of integrated assessment models used in the federal SCC). Although California has no legal obligation to use the federal SCC calculations, the disconnect between available technical approaches to estimating a SCC and the damage threshold needed to justify extension of a carbon market that will likely need to experience significantly higher prices to achieve 2030 and 2050 targets illustrates a significant shortcoming of this potential alternative legal theory.

State-administered allowance auctions fare no better under exceptions three and five. Exception three allows for regulatory fees, but only to the extent that the revenue collected is used to administer a licensing and inspection program. Since the government's cap-and-trade revenue far exceeds CARB's administrative costs for related data collection and verification activities, this exception would not accommodate allowance auctions.[211] Finally, exception five pertains to civil or criminal penalties, which are not applicable to the carbon market as currently designed.

Of Proposition 26's five exceptions, only exception four offers a potential safe harbor for state-administered allowance auctions. It would present reviewing courts with a question of first impression, however, and is therefore fundamentally high risk. Exception four removes from the definition of tax "charge[s] imposed for entrance to or use of state property, or the purchase, rental, or lease of state property." If one were to consider polluting the atmosphere as a use of state property, perhaps charging for this privilege would fit within the fourth exception. As the court in *Morning Star* noted, "[i]f the atmosphere's capacity to assimilate GHGs is viewed as a limited public resource, selling emissions allowances can be analogized to selling a right to use a public resource, similar to a hunting/fishing license, a mineral extraction permit, or a wireless electromagnetic spectrum license."[212]

Although this the atmosphere-as-state-property argument might offer a pathway for avoiding the reach of Proposition 26, the trial court's thought experiment is inconsistent with atmospheric physics. The *Morning Star* court was right to frame that the atmosphere's capacity to safely absorb greenhouse gases as a limited resource, but it is a global resource: the most important greenhouse gases are long-lived and are eventually mixed throughout the global atmosphere.[213] It is therefore unclear how California would claim a specific portion of this global resource as its own. Indeed, more than twenty years of negotiations under the United Nations Framework Convention on Climate Change have failed to produce a global emissions budget, let alone allocate shares to national and sub-national actors such as California.

On the other hand, if California were to characterize allowances themselves as state property, perhaps a reviewing court would be willing to entertain a somewhat looser relationship between state-issued allowance budgets and the global atmosphere's limited capacity to absorb a cumulative stock of globally mixed pollutants. However, two new problems would emerge. First, while it would be

211. CARB's costs of administering cap-and-trade, including the costs of collecting and verifying GHG emissions data, are covered by separate fees authorized by AB 32. Section 38597 authorizes CARB to "adopt . . . a schedule of fees to be paid by the sources of greenhouse gas emissions regulated pursuant to this division, consistent with [s]ection 57001 [of the Health & Safety Code]." CAL. HEALTH & SAFETY CODE § 38597. Section 57001, in turn, requires agencies to "ensure that the amount of each fee is not more than is reasonably necessary to fund the efficient operation of the activities or programs for which the fee is assessed." *Id*. § 57001.

212. *Morning Star*, *supra* note 15, at *17.

213. A number of so-called short-lived climate pollutants (SLCPs) do not exhibit these behaviors, with lifetimes ranging from days to a handful of years. *See, e.g.*, Raymond T. Pierrehumbert, *Short Lived Climate Pollution*, 42 ANNUAL REV. EARTH & PLANET. SCI. 341 (2014). In contrast, CO_2 emissions affect the global carbon cycle over a period of millennia. *See, e.g.,* Ricarda Winkelmann et al., *Combustion of available fossil fuel resources sufficient to eliminate the Antarctic Ice Sheet*, 1(8) SCI. ADVANCES e1500589 (2015).

easier to make the case that the allowances are the state property in question, as opposed the proportion of the global atmospheric commons implicitly claimed by the state, there would be no obvious limiting principle to what could be claimed as state property under this theory. Second, framing the allowance as state property directly conflicts with the existing emissions trading regulations. In fact, all significant cap-and-trade systems in the United States—including California's cap-and-trade program—explicitly state that allowances do not constitute property or property rights.[214] The apparent about-face required to re-label California allowances as "state property" would likely arouse a court's suspicion.

In short, relying on Proposition 26's state property exemption provides a possible basis for reauthorizing the status-quo cap-and-trade program by a simple majority. In our view, however, crafting legislation based on this exemption would be fraught with significant legal risks.

Because a state-administered allowance auction does not fit well within Proposition 26's five exceptions, the legislature likely cannot extend the status quo cap-and-trade regime beyond 2020 by a simple majority vote. With a legislative supermajority, however, any form of extension would be permissible under Proposition 26.

2. Direct All Allowance Auction Revenue to Non-Government Entities.

While Proposition 26 restricts the legislature's ability to authorize new state-administered allowance auctions, case law suggests that a simple legislative majority could authorize allowance auctions, so long as no revenue is remitted to the government.

In *Schmeer v. County of Los Angeles*, the California Court of Appeal for the Second District held that Proposition 26's definition of tax did not include fees collected and retained by non-government actors, even when those fees were imposed by ordinance.[215] *Schmeer* concerned an ordinance passed by the L.A.

214. CAL. CODE REGS. tit. 17, § 95820(c) ("A compliance instrument issued by the Executive Officer does not constitute property or a property right."); *id.* § 95802(a)(69) (defining "compliance instrument" to include California-issued allowances). Other emission trading systems that explicitly state that allowances do not constitute property or property rights include: the sulfur dioxide emissions trading program under the Clean Air Act, *see* 42 U.S.C. § 7651b(f) (2014) ("An allowance allocated under this subchapter is a limited authorization to emit sulfur dioxide in accordance with the provisions of this subchapter. Such allowance does not constitute a property right."); the proposed Waxman-Markey legislation from 2009 that would have established a national carbon market, *see* The American Climate and Energy Security Act of 2009, H.R. 2454, 111th Cong. § 721(c)(1) (2008)

> (An allowance established by the Administrator under this title does not constitute a property right, nor does any offset credit or other instrument established or issued under the American Clean Energy and Security Act of 2009, and the amendments made thereby, for the purpose of demonstrating compliance with this title.).

And the northeastern states' Regional Greenhouse Gas Initiative (RGGI), *see* MODEL CO_2 BUDGET TRADING PROGRAM RULE § XX-1.5(c)(9) (Reg'l Greenhouse Gas Initiative 2013), http://www.rggi.org/docs/ProgramReview/_FinalProgramReviewMaterials/Model_Rule_FINAL.pdf ("A CO_2 allowance under the CO_2 Budget Trading Program does not constitute a property right."). Note that RGGI is a regional program whose enabling laws must be adopted by participating states; the model rule accurately represents state law on this point but is not the binding text in any participating state.

215. *Schmeer*, 153 Cal. Rptr. 3d. at 354. Article XIII C was added to the California Constitution in 1996 by Proposition 218. CAL. SEC. OF STATE, VOTER INFORMATION GUIDE FOR 1996, GENERAL ELECTION 72-77, 108-09 (1996).

County Board of Supervisors, which banned retail stores from providing carryout plastic bags and required stores to charge customers $0.10 per disposable paper bag provided.[216] Under the ordinance, stores kept the proceeds from the sale of paper bags but could only use those proceeds for the costs of complying with the ordinance, including the actual costs of providing the paper bags, and the costs of promoting reusable bags.[217]

L.A. County's bag fee ordinance was challenged as imposing an illegal tax under the provisions that Proposition 26 added to article XIII C of the state constitution.[218] Article XIII C applies to local government measures but its language parallels that of article XIII A. So where article XIII A, section 3(b) defines a state tax as "any levy, charge, or exaction of any kind imposed by the [s]tate," article XIII C, section 1(e) defines local tax as "any levy, charge, or exaction of any kind imposed by local government."

In considering whether the challenged ordinance was a tax within the meaning of Proposition 26, the *Schmeer* court began by observing that "'tax' in ordinary usage refers to a compulsory payment made to the government or remitted to the government."[219] Because the definition of tax in article XIII C, section 1(e) did not "explicitly state that the levy charge or exaction must be payable to government," the court found that subdivision (e) was ambiguous as to whether fees that were imposed by the government but collected and retained by private parties could be deemed taxes.[220] The court therefore looked to other language in article XIII C to resolve the ambiguity.[221]

As with article XIII A, article XIII C expressly excepts certain types of fees from inclusion in the definition of tax.[222] These exceptions, the court noted, "all relate to charges ordinarily payable to the government, including charges imposed in connection with governmental activities or use of government property, fines imposed by the government for a violation of law, [and] development fees[.]"[223] Moreover, the court observed, the first three exceptions specifically mentioned "local government."[224] According to the court, the nature of the charges covered by the exceptions, coupled with specific mentions of "local government" in the first three exceptions, "suggests an understanding that the language 'any levy, charge, or exaction of any kind imposed by a local government'" in subdivision (e) "is limited to charges payable to a local government."[225] This, the court found, "is consistent with the ordinary meaning of the term 'tax.'"[226]

216. *Schmeer*, 153 Cal. Rptr. at 354-55.

217. *Id.*

218. *Id.* at 355.

219. *Id.* at 364.

220. *Id.*

221. *Schmeer*, 153 Cal. Rptr. at 364.

222. The first five exceptions in article XIII C mirror almost exactly the five exceptions in article XIII A. *Compare* CAL. CONST. art XIII A, § 3(b), *with* CAL. CONST. art. XIII C, § 1(e).

223. *Schmeer,* 153 Cal. Rptr. at 364.

224. *Id.*

225. *Id.* at 365.

226. *Id.*

The plaintiffs in *Schmeer* pointed to article XIII A, section 3(a), which imposes a supermajority requirement on "any change in statute which results in any taxpayer paying a higher tax."[227] According to the plaintiffs this language eliminated any requirement that taxes generate revenue for the government.[228] Thus, the plaintiffs argued, article XIII A, section 3(a) extended the definition of tax to government-mandated fees that generated no revenue because they were collected and retained by private parties.[229]

The court disagreed. It first noted that article XIII C contained no similar "any taxpayer paying a higher tax" language.[230] But the court's analysis did not stop there. Rather, it found that the language in article XIII A, section 3(a) was adopted for the sole purpose of ending "the [l]egislature's practice of approving by a simple majority vote so-called 'revenue-neutral' laws that increased taxes for some taxpayers but decreased taxes for others."[231] Because article XIII A, section 3(a) was narrowly aimed at revenue-neutral taxes, the court concluded that it did not indicate a broader intent to include within the definition of tax a privately collected fee that generated no government revenue whatsoever.[232] Accordingly, the court held that, because the paper bag fee was not collected by the county and not remitted to the county, it was not a tax for the purposes of article XIII C.[233]

Schmeer suggests that a simple majority of legislators could authorize an allowance auction by a non-government entity or entities, so long as the revenue generated by the sale of allowances was not remitted to the government. With the passage of SB 32 on a simple majority basis, CARB could potentially design a cap-and-trade program based on the holding in *Schmeer*, subject to the requirement that allowances be freely allocated to non-state entities.[234] Under this arrangement, CARB would continue to mint allowances, impose an auction price floor, monitor emissions, and collect allowances at the end of each compliance

227. *Id.* at 366.

228. *Schmeer,* 153 Cal. Rptr. at 366.

229. *Id.*

230. *Id.*

231. *Id.* To support this finding, the court quoted extensively from the state's 2010 voter information guide, which specifically described the "any taxpayer paying a higher tax" language as extending supermajority requirement to revenue-neutral taxes. The relevant section of the LAO's analysis cited by the *Schmeer* court was prepared by the attorney general. That section provided that:

> [t]he [s]tate [c]onstitution currently [meaning before Proposition 26] specifies that laws enacted 'for the purpose of increasing revenues' must be approved by two-thirds of each house of the [l]egislature. Under current [meaning pre-Proposition 26] practice, a law that increases the amount of taxes charged to some taxpayers but offers an equal (or larger) reduction in taxes for other taxpayers has been viewed as not increasing revenues. As such, it can be approved by a majority vote of the [l]egislature . . . . *New Approval Requirement* [Proposition 26] specifies that state laws that result in any taxpayer paying a higher tax must be approved by two-thirds of each house.

2010 VOTER INFORMATION GUIDE, *supra* note 8, at 58-59 (italics in original).

232. *Schmeer*, 153 Cal. Rptr. at 366.

233. *Id.*

234. We note that this approach likely requires new legislation. Under AB 32, CARB's authority to use a cap-and-trade policy contains an implied limitation that expires at the end of 2020. CAL. HEALTH & SAFETY CODE § 38562(c). Because SB 32 did not modify this provision, an extension of the cap-and-trade program based on the holding in *Schmeer* would need to confront the apparent expiration of authority to use cap-and-trade in any form after 2020. *See infra* Part V(C).

period. In short, CARB would do everything it does now—except that non-state actors would hold title to the allowances sold at auction and would receive all auction revenue, similar to the way that consignment allowances are sold today.

The legislature would have to determine which non-state actors should receive allowance value. It might decide to freely allocate all allowances to regulated parties, in which case no revenue would be raised at all. It could freely allocate some allowances (according to the current allocation formulas) and transfer the remainder to designated private actors; these private actors could then run their own allowance auctions and reap the financial rewards. Finally, the legislature might decide to create a new public benefit nonprofit corporation to manage the distribution of allowance value—call it a "green bank"—which could be made subject to the same restrictions currently imposed on CARB's spending of cap-and-trade revenue. In each instance, the solution lies in the government avoiding any revenue collection, a decision that would have a significant fiscal impact on state spending; in addition, the political and distributional impacts of each option would vary significantly.

Schmeer suggests a way around Proposition 26, but its reach is uncertain. Other courts may balk at extending *Schmeer*'s holding from a local, $0.10 bag-fee to a multi-billion dollar statewide program. Moreover, *Schmeer* concerned article XIII C, while any statewide program would be challenged under article XIII A. Although articles XIII A and XIII C are quite similar, and although the reasoning in *Schmeer* appears equally applicable to article XIII A, another court might read the opinion differently. Finally, the formalistic opinion in *Schmeer* rested on one court's definition of "tax," not on any statutory language. *Schmeer* is binding only in the Second Appellate District and another court elsewhere in the state might simply define tax more broadly to encompass government-imposed but privately collected fees. In short, the logic in *Schmeer* offers a clear pathway for extending the existing cap-and-trade market, but its practical application to multi-billion dollar programs is untested.

3. Adopt an Enforcement Fee

A surer way to avoid Proposition 26's supermajority requirement lies in the fifth exception to the definition of tax, which exempts from supermajority requirements any "fine, penalty, or other monetary charge imposed by the . . . [s]tate, as a result of a violation of law." As discussed above, an emissions trading system with government-sponsored allowance auctions would not fit within this exception. However, this exception could enable a legislative majority to enact what effectively amounts to a carbon tax by passing a statute that prohibits GHG emissions above a certain threshold and authorizes CARB to penalize violators by means of a fine[235]—essentially, an application of the theory developed by University of Chicago Professors Jonathan Masur and Eric Posner, who argue that environmental regulators often have the authority to impose Pigouvian taxes using

235. We are grateful to Stanford Professor James Sweeney for pointing out that transportation fuels are brought under the cap-and-trade market not via a threshold for individual point sources, but rather an indirect measure of total emissions that would ensue if the transportation fuel provider's total annual sales were to be fully combusted. CAL. CODE REGS. tit. 17, § 95812(d)(1). This approach—or most any other threshold criteria—could be replicated in the approach discussed here; we use a point source criterion for convenience only.

their enforcement powers, in lieu of conventional command-and-control regulations.[236]

Setting the amount of the fine or penalty would be no different than setting the amount of a carbon tax.[237] The legal standard under Proposition 26 is somewhat vague, however, as the state must show by a preponderance of the evidence that "the amount" of any levy, charge, or exaction that is not a tax "is no more than necessary to cover the reasonable costs of the government activity."[238] As a threshold matter, it is not clear what the "government activity" would be in the case of any enforcement fee, not just one designed to price carbon. One could argue that the government activity for a CO_2 pollution enforcement fee could be defined as reducing GHG emissions using the money collected from an enforcement fee. From this perspective, reasonable costs under Proposition 26 could be defined as the state's best judgment about the costs of mitigating GHG emissions—for example, based on modeling studies that calculate the carbon price necessary to achieve the state's 2030 and 2050 targets. Under this theory, the constraints of Proposition 26 would essentially resemble the challenge of identifying the appropriate carbon tax to achieve a given emissions target. Alternatively, the legislature or a designated regulator (such as CARB) could establish a Pigouvian fine by pegging the enforcement fee to an amount equal to the estimated harm that emissions impose on society, thereby equalizing the marginal and social costs of emissions.[239] Whatever the level of the enforcement fee, fining every GHG emitter would prove practically impossible and politically untenable; therefore if the legislature pursues this approach, it should also authorize or require the implementing agency to restrict its enforcement actions to emitters above a certain emissions threshold—potentially at the same threshold currently used to determine whether or not an entity is covered under the cap-and-trade program (25,000 tCO_2e per year).[240]

Because enforcement fines are exempt from Proposition 26's definition of tax, the legislature may have additional flexibility in directing revenue use beyond what applies to the current GGRF under the constraints of *Sinclair Paint*. The state must identify a "government activity" for which its specified enforcement fee amount is reasonably necessary; that activity or activities should define how

236. Jonathan Masur & Eric Posner, *Toward a Pigouvian State*, 164 U. PA. L. REV. 93, 109-120 (2015). Pigouvian taxes are named for the English economist Arthur Pigou. A Pigouvian tax is a tax assessed on market activities that generate private benefits while imposing costs on third parties. Economists refer to these costs as negative externalities. By assigning a price to negative externalities, Pigouvian taxes align private and social costs thereby making markets function more efficiently. Masur and Posner argue that the EPA should adopt a fine-based strategy, similar to the one we propose here, in order to enact what amount to Pigouvian taxes under various provisions of the Clean Air Act.

237. While functionally identical to a carbon tax in most respects, a fine-based system would be more onerous than a tax in at least one respect. While taxes are deductible against federal income taxes, section 162(f) of the Internal Revenue Code prohibits deductions for "any fine or similar penalty paid to a government for a violation of any law." I.R.C. § 162(f).

238. CAL. CONST. art. XIII A, § 3(d).

239. This is the conceptual approach taken by the United States' Social Cost of Carbon calculation. However, the California-specific damages from GHG pollution are unlikely to justify even current carbon market prices, let alone the levels that would be required to meet the 2030 and 2050 targets. *See* discussion in note *supra* note 210.

240. CAL. CODE REGS. tit. 17, § 95812(c) (2016).

revenue from fines could be spent. While it remains difficult to imagine enforcement fees flowing to the general fund, one can imagine funds being deposited in the GGRF and potentially even returned to citizens or used to reduce other taxes,[241] as part of an effort to address the distribution of costs from an economy-wide enforcement fee.

Even if the enforcement fee concept finds firmer legal ground than other simple majority strategies, an enabling statute that makes certain GHG emissions illegal could cause unintended problems for regulated entities. As an example, cross-default provisions in financial contracts are sometimes triggered by enforcement actions or violations of state law.[242] If these outcomes cannot be avoided through careful drafting, the economic and political consequences of the enforcement fee concept could well be prohibitive.

If challenged, a carbon tax-like system of enforcement fines would present the courts with a legal issue of first impression. However, an enforcement fine would occupy firmer legal ground than a policy that directs all allowance auction revenues to private actors because fines fit squarely within the plain language of Proposition 26's fifth exception, rather than by extension of a single judicial interpretation. To overturn a carbon fine under article XIII A, section 3(b)(5), a court would have to somehow infer from Proposition 26's anti-tax purpose an unstated exception to the stated exception. Such a reading seems unlikely—and thus, despite the irony, the legislature could implement what effectively constitutes a carbon tax by simply majority.

C. *Regulatory Options*

Even without new legislation, CARB has indicated it will pursue additional regulatory strategies to achieve California's 2030 target. Indeed, CARB has already begun its process for producing a 2030 Scoping Plan that will codify the state's approach. In June 2016, CARB released a concept paper that contemplates four different potential scenarios: (1) an extension of the cap-and-trade program alongside complementary policies, (2) the expiration of cap-and-trade with a focus on industrial sector complementary policies, (3) the expiration of cap-and-trade with a focus on transportation sector complementary policies, and (4) the expiration of cap-and-trade, which would be replaced with a carbon tax and complementary policies.[243]

Consistent with a preference for the first of these options, CARB subsequently released a draft proposed regulation in July to extend the carbon market

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241. The idea of a revenue-neutral carbon tax, which returns revenue to taxpayers by means of a distribution, through offsetting tax relief, or some combination of the two, has enjoyed a degree of conservative political support that is unusual for both climate regulation and new taxes. *See* N. Gregory Mankiw, *The Key Role of Conservatives in Taxing Carbon*, N.Y. TIMES (Sept. 4, 2015), http://www.nytimes.com/2015/09/06/upshot/the-key-role-of-conservatives-in-taxing-carbon.html. British Columbia's right-of-center government enacted a revenue-neutral carbon tax in 2008, and the policy has earned praise on the *Wall Street Journal*'s op-ed page. *See* George Schulz & Gary Becker, *Why We Support a Revenue Neutral Carbon Tax*, WALL ST. J. (Apr. 7, 2013), http://www.wsj.com/articles/SB10001424127887323611604578396401965799658.

242. We are grateful to Judson Boomhower for this observation.

243. CAL. AIR RES. BD., 2030 TARGET SCOPING PLAN CONCEPT PAPER (2016), http://www.arb.ca.gov/cc/scopingplan/scopingplan.htm.

through 2050.[244] Notably, this draft proposal did not specify the existing statutory authority under which CARB believes it can act through 2050. This issue is likely to lead to litigation and warrants a brief preview here before we proceed to discussing additional technical solutions that CARB could potentially pursue on the basis of a different regulatory theory.

The key question is what authority CARB has in the post-2020 period, given that most of the legally binding language in AB 32 is designed to meet a statewide 2020 emissions target. As UCLA's Cara Horowitz has pointed out, however, CARB's authority under AB 32 does not expire in 2020.[245] Rather, state law makes clear that the 2020 target is to remain in effect after 2020.[246] Moreover, the legislature declared its intent "that the [2020] statewide emissions limit . . . be used to maintain and continue reductions in emissions of greenhouse gases beyond 2020."[247] This instruction is somewhat confusing, however, as it is not clear how a defined limit for 2020 can be used to extend deeper reductions after 2020 except to preclude less strict targets in the future; its relevance is also lessened now that the legislature has established a legally binding target for 2030.[248] In any case, an expression of legislative intent is not the same thing as delegation of authority to a regulator.

In its draft proposal to extend cap-and-trade, CARB loosely refers to authority to "maintain and continue" emission reductions beyond 2030.[249] If this provision authorizes CARB to pursue the governor's 2030 and 2050 climate targets, as CARB suggests it does, it does not resolve the question of whether CARB can use cap-and-trade after 2020. In contrast, AB 32 empowers CARB to "establish[] a system of market-based declining annual aggregate emission limits . . . applicable from January 1, 2012, to December 31, 2020, inclusive."[250] While this section does not explicitly prohibit CARB from imposing a declining emissions cap after 2020, the specific affirmative grant of authority implies a negative, strongly suggesting that AB 32 does not authorize CARB to enact a post-2020 emissions cap—at least, not one that goes below 1990 emissions levels.

In addition, we note that the Legislative Counsel Bureau, which provides independent legal advice to the state legislature, addressed CARB's post-2020 legal authority in an April 2016 memo. That analysis found that CARB lacks both the authority to establish post-2020 statewide targets under the "maintain and continue" provisions and that separately the use of cap-and-trade is not authorized after 2020.[251] While the letter is advisory only and cannot substitute for what a

244. PRELIMINARY DRAFT PROPOSAL, *supra* note 27.

245. Cara Horowitz, *AB 32 and Post-2020 Climate Goals*, LEGAL PLANET (Feb. 20, 2015), http://legal-planet.org/2015/02/20/ab-32-and-post-2020-climate-goals/.

246. CAL. HEALTH & SAFETY CODE § 38551(a) (West 2016).

247. *Id.* § 38551(b).

248. SB 32, *supra* note 25.

249. PRELIMINARY DRAFT PROPOSAL, *supra* note 27, at ES-1, 1. Again, there is no explicit analysis of CARB's legal authority in this document, just two passing references and no discussion of the other applicable provisions in AB 32.

250. CAL. HEALTH & SAFETY CODE § 38562(c) (West 2016).

251. Letter from Diane F. Boyer-Vine, California Legislative Counsel Bureau, to Senator Jean Fuller (Apr. 19, 2006) (on file with author), http://careaboutenergy.org/wp-content/uploads/Leg-Counsel-Opinion-

court would independently determine, it does raise serious questions about the legal risks of CARB's stated regulatory strategy.

Nevertheless, AB 32 might not preclude CARB from indefinitely capping emissions at the 2020 target level; a flat-line emissions cap would not impose "*declining* annual aggregate emissions levels," and is consistent with the language of sections 38551(a) and (b), as this would not require CARB to assert the authority to independently establish legally binding statewide emission targets beyond 2020. Moreover, we note that when CARB has been challenged on interpretation of its statutory authority, including on the question of how deeply CARB planned to cut emissions in the original scoping plan, reviewing courts have applied a broadly deferential standard of judicial review.[252] As a result, CARB could potentially adopt regulations requiring GHG emitters to obtain allowances after 2020, based on its existing authority under AB 32. It is likely any such rules would be challenged, however, so any regulatory implementation strategy would be contingent on favorable judicial review. CARB would need to prevail on two fronts.

First, CARB would need to convince a court that it has the authority to extend the cap-and-trade market beyond 2020—although to implement our proposed solutions, CARB would only need to establish the authority to hold emissions constant at 2020 levels in the cap-and-trade system, not to enact a decreasing cap. A challenge on this point would present factually complex but essentially conventional administrative law questions for a reviewing court.[253] We note that while SB 32 established a 2030 statewide greenhouse gas emissions target, this new law cannot be used to justify CARB's post-2020 authority to use cap-and-trade with the auction of state-owned allowances. Any legal theory that relies on SB 32 rests on a "change in statute" that was authorized by only a simple legislative majority, and therefore violates Proposition 26's supermajority requirements.[254] As a result, CARB would need to convince a court that it has the necessary legal authority to continue cap-and-trade solely on the basis of existing authority in AB 32.

Second, the regulatory strategies outlined below require a favorable outcome in current litigation over CARB's cap-and-trade program. CARB would need the *Morning Star* decision to be upheld or overruled on narrow grounds that require only relatively minor modifications to the state's allowance auctions. Because AB 32 was passed before Proposition 26 was enacted, challenges to any such regulatory action will be subject to the pre-Proposition 13 line of tax/fee cases, including

GGRF.PDF; *see also* David Siders, *Legislature's Attorney says Jerry Brown Can't Set Climate Target*, SACRAMENTO BEE (Apr. 21, 2016).

252. *See, e.g.*, Ass'n of Irritated Residents v. Cal. Air Res. Bd., 206 Cal. App. 4th 1487, 1494-95 (Ct. App. 2012) (applying a deferential standard of review to evaluate whether or not CARB acted arbitrarily in its selection of the stringency of climate mitigation policy efforts in its initial 2020 scoping plan); Our Children's Earth Found. v. Cal. Air Res. Bd., 234 Cal. App. 4th 870, 888 (Ct. App. 2015) (quoting *Ass'n of Irritated Residents*, 206 Cal. App. 4th at 1495 ("The directives [in AB 32] . . . are all 'exceptionally broad and open-ended,' leaving 'virtually all decisions to the discretion of [CARB].'")).

253. California courts apply a deferential standard of review to quasi-legislative actions, such as adoption of the scoping plan pursuant to AB 32, which parallels the familiar *Chevron* inquiry into whether a federal administrative agency has acted in an "arbitrary and capricious" manner. *Ass'n of Irritated Residents*, 206 Cal. App. 4th at 1494 (citing Yamaha Corp. of Am. v. State Bd. of Equalization, 960 P.2d 1031 (Cal. 1998)); *see also* Chevron U.S.A., Inc. v. Nat. Res. Def. Council, 467 U.S. 837 (1984).

254. CAL. CONST. ART. XIIIA § 3(a).

Sinclair Paint and the final outcome in *Morning Star/California Chamber of Commerce*.[255]

In addition, CARB might also need to adjust its use of revenue to remain in compliance with the *Sinclair Paint* doctrine, even assuming the agency's complete victory in the *Morning Star/California Chamber of Commerce* appeal. Despite *Sinclair Paint*'s permissive standards, CARB would still have to show that the revenue generated by a post-2020 cap-and-trade regime did not "exceed the reasonable costs" of the regulatory activities they support and that allowances costs were "reasonably related" to the regulatory burdens imposed by the payers' activities. In finding that the current cap-and-trade program satisfied the *Sinclair Paint* test, the *Morning Star* court relied heavily on AB 1532's requirement that allowance revenue be used to "further the regulatory purposes" of AB 32.[256] But AB 32's primary purpose is to reduce emissions to 1990 levels by 2020. And if this emission reduction goal were reached and surpassed—as appears likely, through implementation of laws like SB 350 and SB 32—the collection of billions of dollars in allowance revenue could be more difficult to justify as furthering AB 32's purposes.

To best justify an extension of the cap-and-trade market under AB 32's authority and the *Sinclair Paint* doctrine, the state should consider adopting new rules to govern the use of allowance revenue.[257] One possibility would be to require that post-2020 revenue from government-owned allowances be used exclusively for climate adaptation efforts. Climate adaptation refers to "adjustment in natural or human systems in response to actual or expected climatic stimuli, which moderates harm or exploits beneficial opportunities."[258] In California, anticipated impacts of climate change include rising sea levels, acidification of coastal waters, prolonged drought, and increasingly severe wildfires.[259] These impacts are expected to cause severe economic dislocations and inflict widespread damage on public and private property. While impossible to forecast precisely, the state's 2009 Climate Adaptation Plan cites an estimate that adaptation costs could run into the "tens of billions of dollars per year."[260]

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255. *See* discussion of *S. Cal. Edison*, *supra* Part III(B).

256. *Morning Star*, *supra* note 15, at *20.

257. This presumes that the *Morning Star/California Chamber of Commerce* case is resolved along the tax/fee dimensions of *Sinclair Paint*, and not on any of the other potential theories that have been raised in litigation.

258. INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2014: IMPACTS, ADAPTATION, AND VULNERABILITY—ANNEX II: GLOSSARY at 1758 (2014), https://www.ipcc.ch/pdf/assessment-report/ar5/wg2/WGIIAR5-AnnexII_FINAL.pdf.

259. *See* J. M. MELILLO ET AL., CLIMATE CHANGE IMPACTS IN THE UNITED STATES: THE THIRD NATIONAL CLIMATE ASSESSMENT (2014). The report found that:

> If adaptive action is not taken, coastal highways, bridges, and other transportation infrastructure (such as the San Francisco and Oakland airports) are at increased risk of flooding with a 16-inch rise in sea level in the next 50 years, an amount consistent with the 1 to 4 feet of expected global increase in sea level. In Los Angeles, sea level rise poses a threat to groundwater supplies and estuaries, by potentially contaminating groundwater with seawater, or increasing the costs to protect coastal freshwater aquifers.

Id. at 469; *see also* CAL. NAT. RES. AGENCY, 2009 CALIFORNIA CLIMATE ADAPTATION STRATEGY (2009), http://resources.ca.gov/docs/climate/Statewide_Adaptation_Strategy.pdf.

260. CAL. NAT. RES. AGENCY, *supra* note 259, at 3.

Tying allowance revenue to climate adaptation activities would help insulate a post-2020 cap-and-trade program from legal challenge by more closely aligning allowance auctions with recognized *Sinclair Paint*-type regulatory mitigation fees. The stream of post-2020 allowance revenue is unlikely to "exceed the reasonable costs" of coping with tens of billions of dollars in climate-related damages.[261] While there is "no clear test for determining when a fee is 'reasonably related' to the adverse effects addressed by the regulatory activities for which the fee is charged,"[262] a nexus between GHG emissions and climate adaptation is readily apparent. Finally, by using allowance revenue to fund adaptation efforts, California would effectively require the state's largest GHG emitters to pay for a portion of the damage wrought by GHG emissions. In so doing, it would bring allowance auctions closer to the paradigm regulatory fee in *Sinclair Paint*, which required "polluters [to] bear a fair share of the cost of mitigating the adverse health effects their products created in the community"[263]—although new questions could potentially emerge with respect to the extent to which California's regulated entities are responsible for impacts from a global environmental problem.[264]

In addition to these legal concerns, regulatory strategies for extending California's market-based policies after 2020 must confront the technical problem of using a constant cap to pursue deeper emission reductions. Because a flat cap in the carbon market (held constant at 1990 emissions) will be significantly weaker than the 2030 limit established by SB 32 (40% below 1990 levels), it cannot be used to drive emission reductions without careful implementation strategies. In turn, viable implementation strategies require reform in the allowance allocation process and therefore involve barriers from a political economy perspective.

1. Rely on AB 32 to Extend the Carbon Market

A flat cap after 2020 that extends CARB's existing reliance on free allocations will not drive emissions towards the 2030 target because demand for compliance instruments will remain slack. Individual covered entities might need to purchase some allowances, but given CARB's practice of freely allocating a significant number of allowances—coupled with complementary measures, such as those contained in SB 350 (which require emission reductions and therefore reduce demand for permits)—it is likely that many regulated parties will have surplus allowances available for sale. In that instance, any covered entity that has not received sufficient free allowances will be able to purchase them from other covered entities, which would be willing to sell for a lower price than the government

261. State courts have found that regulatory fees do not exceed the reasonable costs of regulation simply because those fees cannot fully cover the costs of applicable regulatory activities. *See* discussion, *supra* Part II(B).

262. *Morning Star*, *supra* note 15, at *20.

263. *Sinclair Paint*, 937 P.2d at 1356.

264. For an analogous federal issue, see generally Arden Rowell, *Foreign Impacts and Climate Change*, 39 HARV. ENVT'L L. REV. 371 (2015) (criticizing the inclusion of global climate damages in the U.S. social cost of carbon because the metric is used to assess domestic costs and benefits for federal regulations); *see also* Ted Gayer & W. Kip Viscusi, *Determining the Proper Scope of Climate Change Policy Benefits in U.S. Regulatory Analysis: Domestic versus Global Approaches*, 10(2) REV. ENVT'L ECON. & POL'Y 245 (2016) (reviewing similar issues from an economic perspective).

auction's price floor would otherwise impose. As a result, secondary market trading prices would fall below the minimum auction price, producing an anemic price signal that renders the cap-and-trade program ineffective at reducing emissions and unable to raise government revenue.

In order to deliver a post-2020 emissions trading regime enacted by regulatory action under existing legislative authority, the critical technical challenge will be to find a way to reduce the supply of allowances through indirect means. One possibility involves reforming the Allowance Price Containment Reserve (APCR). Under the current market design rules, the APCR functions as a limited supply price ceiling—a quantity-limited reserve of allowances that CARB sets aside in a separate account[265] and makes available for purchase at auction only if auction prices exceed specified prices ($40, $45, and $50 per ton CO_2 for each of three equally sized tiers).[266] Essentially, these allowances are removed from circulation until such time as the auction price triggers their release. If market prices remain below the APCR threshold, total emissions from covered entities will fall below the total cap—resulting in emissions at or below the cap minus the number of allowances held in the APCR.

The APRC's relatively weak power to set a maximum cap-and-trade market price could be the saving grace for a post-2020 regulatory implementation strategy. Economic advisers serving on CARB's Emissions Market Assessment Committee (EMAC) have expressed concern about the APCR, noting that the limited quantity of allowances in the APCR could easily be exceeded if supply exceeds demand for more than a brief period of time. As these experts have noted, once the APCR is depleted, market prices have no hard price ceiling and could exceed politically viable limits, resulting in the suspension or disruption of the cap-and-trade program.[267] While this concern is indeed reasonable, the shortcoming the EMAC has identified might enable the system to function after 2020. A quantity-limited APCR also offers an opportunity to reduce the effective net cap in the market, removing additional allowances from a cap-and-trade system with a flat cap. Through careful study, CARB could identify a formula for increasing the APCR post-2020 that reduces the supply of allowances available at auction down to the level of the 2030 target. Thus, a reformed APCR would enable a functional post-2020 cap-and-trade market and, by setting aside a large quantity of allowances in a newly expanded APCR, simultaneously mitigate the EMAC advisers' concerns about the potential for significant supply/demand imbalance going forward.

265. CAL. CODE REGS. tit. 17, § 95870(a) (2016).

266. *Id.* § 95913(f)(3).

267. SEVERIN BORENSTEIN ET AL., ISSUE ANALYSIS: PRICE CEILING IN THE GREENHOUSE GAS EMISSIONS CAP-AND-TRADE MARKET (2013); *see also* CAL. HEALTH & SAFETY CODE § 38599 (authorizing the governor to suspend implementation of state climate policy in "extraordinary circumstances" or if there is a "threat of significant economic harm").

2. Rely on AB 32 to Pivot to a Default Carbon Tax Regime

Alternatively, CARB could pivot the operation of the post-2020 market to function like a default carbon tax.[268] In many respects, this would preserve the status quo. The combination of complementary measures and resource shuffling have led to allowance supply exceeding market demand, as a result auctions are routinely clearing at the price floor, an outcome no different in effect from a carbon tax.

The challenge to extending this system after 2020 with a flat cap parallels that of the cap-and-trade extension. While an increasing auction floor price would remain in effect, the demand for permits at auction is likely to plummet, with weak mitigation and revenue generation effects as described above. Should CARB wish to maintain a simple tax-like price signal, it will need to find ways to make the price applicable to more regulated parties. The challenge would then be to ensure that regulated parties seek to satisfy their demand through purchases of allowances at auction, rather than through lower-priced secondary trading. One option would be to completely reform the allowance allocation process. Were CARB to move towards full auctioning of allowances, overall market demand might still be relatively low due to the mitigation required by complementary measures. But with 100% auctioning (or another sufficiently high share), those regulated parties whose emissions obligations are not eliminated through complementary measures would need to buy their allowances either from government auctions (which clear at or above the price floor) or from secondary trading (which, due to the lack of free allocation, should remain at or above auction price floors as a result of market forces).[269] Because the post-2020 cap would be so much higher than the 2030 statewide target, one would expect a significant oversupply of permits, and therefore auctions are very likely to clear at the price floor and not sell all available allowances.

Under such a system, the effective cost of mitigation would largely be determined by the extent and nature of complementary measures. Those regulated entities whose actions are determined by complementary measures will face implicit carbon prices as determined by those measures; and those whose mitigation efforts are not driven by these complementary measures will face a de facto carbon price as established by the cap-and-trade market's price floor. Although such a system would be less transparent than an idealized market-based policy, it would extend a default carbon price that could eventually contribute to further market-based reforms that harmonize the costs of climate mitigation across sectors.

268. For an overview of how tax and emissions trading systems can be designed to create similar economic incentives, *see generally* Lawrence H. Goulder & Andrew Schein, *Carbon Taxes vs. Cap and Trade: A Critical Review*, 4(3) CLIMATE CHANGE ECON. 1350010 (2014).

269. We note that in this scenario, the necessary program design would suggest a government intention to force regulated parties to purchase allowances at auction, potentially undercutting the state's argument in the *Cal. Chamber of Commerce* appeal that auction participation is voluntary.

VI. CONCLUSION

To continue employing market-based climate policies after 2020, California policymakers need either a legislative supermajority or a detailed strategy to satisfy the requirements of Propositions 13 and 26. Much will depend on the resolution of the *Morning Star*/*California Chamber of Commerce* litigation over the state's current carbon market, with eventual California Supreme Court review likely given the fiscal and policy stakes. But even a complete victory for CARB in this case will require additional action to continue the use of a cap-and-trade system after 2020. The details (and legal risks) depend on whether CARB pursues a legislative or regulatory justification for establishing post-2020 legal authority.

Proposition 26 was clearly intended to expand Proposition 13 and require a legislative supermajority for any new law that raises taxes on any citizen. Nevertheless, the easiest path forward for market-based climate policy appears to be new legislation authorizing an enforcement fee that operates as a simple carbon tax. By directly targeting an explicit exemption for enforcement fees contained within the clear language of Proposition 26, this approach should enable a simple legislative majority to retain an element of market-based climate policies after 2020. Nevertheless, this strategy could also raise new challenges for covered entities whose private contracts are affected by government enforcement actions.

Alternatively, a simple legislative majority could rely on the holding in *Schmeer* to pass a statute extending the existing cap-and-trade system and reforming the allowance auctioning process such that the state does not collect any revenue. This could be accomplished by freely allocating all allowances to regulated parties or gifting allowances to some preferred set of third party stakeholders. Both approaches raise equity issues, however, and eliminate a critical source of state revenue. Along similar lines, and with fewer practical consequences, the state could adopt a "green bank" model in which the government freely allocates allowances to a specially chartered entity subject to the same restrictions that currently apply to the current greenhouse gas reduction fund. However, each of these approaches rests on extending a formalist judicial interpretation issued in the context of a $0.10 bag-fee to a multi-billion dollar statewide program.

Additional options are available if state policymakers can rely on existing statutory authority, rather than new legislation. For approaches in this category to succeed, CARB would need to prevail in the *Morning Star/California Chamber of Commerce* case and should consider shifting revenue use away from mitigation and towards adaption, in order to further the purpose of a statute (AB 32) that does not explicitly justify deeper statewide GHG reduction targets. CARB would also likely face litigation over AB 32's lack of explicit authority to enact market-based policies after 2020—a distinct question from the authority to maintain statewide emissions at 1990 levels after 2020, which is explicit.

If CARB can extend a cap-and-trade system that remains at 1990 levels after 2020 without new legislation—despite the apparent limitations to its authority under AB 32—it could revise its regulations to drive emissions lower in one of at least two ways. First, CARB could retain a conventional cap-and-trade system by issuing a new regulation that transfers a significant portion of allowances from the primary auction supply to the APCR, thereby effectively lowering the net cap in line with its preferred policy trajectory towards the 2030 target codified by SB 32.

Second, CARB could attempt to continue operating its trading system with auctions clearing at the price floor. In this case, however, a rising price floor would only function if CARB largely eliminates its free allocation of allowances. Even if free allocation were eliminated, we note that this system would still permit a variety of effective carbon prices. The auction price floor would only apply to regulated parties' emissions after taking into account the effect of applicable complementary measures, which independently cause emission reductions at different effective carbon prices.

State policymakers' strategic choices have clear implications for the contribution of market-based climate policies towards California's 2030 climate target. They are equally relevant to California's neighbors as well. In the current CAISO Energy Imbalance Market, resources that wish to be considered for dispatch into CAISO territory must submit a GHG Bid Adder that is used in calculation of the market-clearing price.[270] The Bid Adder is generally determined according to facility-level heat rate and emissions factors[271] multiplied by a GHG allowance price that is benchmarked to three secondary trading indices.[272] By design, the Bid Adder is meant to preferentially send lower-emitting resources to CAISO territory, reflecting the lowest-cost dispatch in light of California's carbon pricing policies.

Were CAISO to further expand its energy markets to neighboring states, a similar structure would presumably be needed for non-EIM energy markets. The issue requires further study, however, because of the difference between in-state and regional GHG emissions. California legislators have indicated that they see California's ability to reduce regional GHG emissions as a prerequisite to CAISO expansion,[273] yet the carbon market's prohibition on resource shuffling does not apply to short-term transactions that clear CAISO energy markets.[274] While integrating state carbon pricing into the CAISO dispatch algorithm should ensure reductions in emissions associated with electricity imported to California, state carbon pricing might not be effective in ensuring that regional GHG emissions fall in tandem. After all, electricity importers in California have no obligation to make sure that the high-emitting resources they avoid due to state carbon pricing are not sold to their neighbors in an expanded CAISO.

Meanwhile, we note that additional CAISO EIM tariff reforms will be needed should the cap-and-trade market expire at the end of 2020. In that case, the allowance price benchmarks referenced in the CAISO tariff would be zero. Participating out-of-state resources would then need to submit a Bid Adder of zero dollars, which would preclude their delivery into CAISO territory.[275] While this is perhaps

270. CAISO Tariff, *supra* note 30, § 29.32(a)-(b).

271. *Id*. § 29.32(a)(3)(A); *see also id.* § 29.32(a)(3)(B)-(C) (providing alternative Bid Adder determinations).

272. *Id*. § 39.7.1.1.1.4 (specifying the method for calculating GHG allowance prices for the EIM Bid Adder).

273. Letter from Kevin de León, President Pro Tempore, Cal. Senate, to Edmund G. Brown, Cal. Governor (Feb. 4, 2016); *see also* Robert Walton, *CA lawmakers: PacifiCorp-CAISO regional market could hurt clean energy targets*, UTILITY DIVE (Feb. 8, 2016), http://www.utilitydive.com/news/ca-lawmakers-pacificorp-caiso-regional-market-could-hurt-clean-energy-targ/413480/.

274. CAL. CODE REGS. tit. 17, § 95852(b)(2)(A)(10).

275. CAISO Tariff, *supra* note 30, § 29.32(b)(2).

a trivial administrative problem to fix, it illustrates how important resolution of the future of California's cap-and-trade program is to the unfolding dynamics of western electricity markets.