

Enforcement or Fiction? Considering Grants of Authority Under the California Global Warming Solutions Act of 2006 and an Alternative to Compel Enforcement

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I. INTRODUCTION

California has long established itself as a leader in climate change policy, with a deeply entrenched and ever-developing regulatory framework.¹ The state is home to some of the earliest research on, and regulations targeted at, mitigating the severe implications of greenhouse gas (GHG) emissions,

1. See S.B. 455 (Regional Clean Air Incentives Market), Stats. 1994, ch. 1179 (Cal. 1994). California’s South Coast Air Quality Management District [SCAQMD] program to reduce emissions of nitrous oxide and sulfur oxide), recently updated at EPA Approval of California Air Plan Revisions, SCAQMD portion of California’s State Implementation Plan (SIP), 40 C.F.R. § 52 (effective Oct. 16, 2017); Assemb. B. 1493, 2001-2002 Reg. Sess. (Cal. 2002) (codified at CAL. HEALTH & SAFETY CODE § 43018.5) (Deering 2018) (“Pavley Legislation” or “Pavley I and Pavley II,” requiring the California Air Resources Board [CARB] to adopt regulations designed to reduce GHG emissions from passenger vehicles, light-duty trucks, and noncommercial vehicles sold in California after the statute went into effect and creating statewide GHG reduction targets (2009-2025) for new passenger vehicles and trucks); Exec. Order No. S-3-05 (issued 2005 by Governor Arnold Schwarzenegger that called for statewide GHG emissions reductions to 1990 levels by 2020 and 80 percent reduction from 1990 levels by 2050), <https://www.gov.ca.gov/news.php?id=1861> [<https://perma.cc/H6D3-BWBL>]; Assemb. B. 32 (California Global Warming Solutions Act of 2006), 2005-2006 Reg. Sess. (Cal. 2006), CAL. HEALTH & SAFETY CODE §§ 38500–38599 (Deering 2018) (calling for statewide GHG emissions reductions to 1990 levels by 2020) (discussed in detail in Section II below); Exec. Order No. S-01-07 (Jan. 18, 2007) (issued 2007 by Governor Arnold Schwarzenegger directing CARB to reduce carbon density of California’s transportation fuels by at least 10 percent by 2020 and ultimately adopting the Low Carbon Fuel Standard for fuel providers), <https://www.gov.ca.gov/news.php?id=5172> [<https://perma.cc/MJ87-2V2R>]; Exec. Order No. B-16-2012 (Mar. 23, 2012) (issued by Governor Edmund Brown Jr. directing state entities to facilitate a statewide transition to zero-emission vehicles and setting benchmarks [2015, 2020, 2025] for infrastructure development and an 80 percent GHG emissions reduction goal from 1990 levels for the transportation sector by 2050), <https://www.gov.ca.gov/news.php?id=17472> [<https://perma.cc/9M4W-5PQ4>]. See also S.B. 197, ch. 250 Stats. of 2016 (Cal. 2016) https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB197 [<https://perma.cc/4TAZ-QDKJ>]; S.B. 350, ch. 547, Stats. of 2015 (Cal. 2015) https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB350 [<https://perma.cc/N4SM-7QFL>]; Assemb. B. 398, ch. 135, Stats. of 2017 (Cal. 2017), https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180AB398 [<https://perma.cc/CV9Z-W3TC>]; Assemb. B. 617, ch. 136, Stats. of 2017 (Cal. 2017), https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201720180AB617 [

like carbon dioxide (CO₂), on Earth’s atmosphere.² It is therefore unsurprising that California’s regulatory approaches for climate change mitigation and GHG emissions reductions influence local and national climate change law and policies.³ This influence also notably percolates international climate policy.⁴ However, before California may definitively proclaim itself as a

2. See FRED PEARCE, WITH SPEED AND VIOLENCE: WHY SCIENTISTS FEAR TIPPING POINTS IN CLIMATE CHANGE 10–13 (2007) (explaining Charles Keeling’s 1950’s monitoring of atmospheric levels of CO₂ at Scripps Institution of Oceanography in La Jolla, California). Keeling’s most notable discovery—now known as the Keeling Curve—was the gradual increase of superimposed CO₂ emissions each year. *Id.* Before his death in 2005, Keeling voiced concerns about earth’s weakening natural ability to absorb these emissions (known today as “carbon sinks”), and ultimately evidenced the ability of humans to “tamper with the planetary thermostat.” *Id.* at 12. See also RECLAIM, *supra* note 1 (establishing in the 1990’s an emissions trading program for facilities emitting nitrogen oxides (NO_x) and sulfur oxides (SO_x) in the South Coast Air Basin).

3. CAL. AIR RES. BD., THE 2017 CLIMATE CHANGE SCOPING PLAN UPDATE: THE PROPOSED STRATEGY FOR ACHIEVING CALIFORNIA’S 2030 GREENHOUSE GAS TARGET 130–36 (2017), https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf [<https://perma.cc/JQ9X-H7T6>] [hereinafter SCOPING PLAN UPDATE] (providing directives and agendas for California’s state and local climate policies). See also Notice of Decision Granting Waiver of Clean Air Act Preemption for California’s 2009 and Subsequent Model Year Greenhouse Gas Emission Standards for New Motor Vehicles, 74 Fed. Reg. 32744–84 (July 8, 2009), <https://www.uschamber.com/sueandsettle/pleadings/California%20v.%20EPA/Grantingwaiver.pdf>; 42 U.S.C.S. §§ 7543(b) (motor vehicles), 7543(e) (nonroad sources) (LEXIS through PL 115–253) (granting and California’s Waiver under the Federal Clean Air Act). Most recently, California passed S.B. 100 (De León) to generate 100% of the state’s energy from renewable sources by the end of 2045. S.B. 100, 2018 Leg., Reg. Sess. (Cal. 2018) (approved by Governor Sept. 10, 2018), https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180SB100 [<https://perma.cc/ESK4-9FB9>].

4. CAL. HEALTH & SAFETY CODE § 38501(c) (Deering 2018) (“California has long been a national and international leader on energy conservation and environmental stewardship efforts, including the areas of air quality protections, energy efficiency requirements, renewable energy standards, natural resource conservation, and greenhouse gas emission standards for passenger vehicles.”); ENVTL. DEF. FUND, *California Leads Fight to Curb Climate Change*, <https://www.edf.org/climate/california-leads-fight-curb-climate-change> [<https://perma.cc/QUF8-6J9L>]; John Monterubio, *Recognition of Property Rights in Carbon Credits Under California’s New Greenhouse Gas Cap-and-Trade Program*, 12 SUSTAINABLE DEV. L. & POL’Y no.2, Winter 2012, at 32 (calling California “a pioneer of cap-and-trade”); ENVTL. PROT. AGENCY, *EPA’s Evaluation of the RECLAIM Program in the South Coast Air Quality Management District*, <https://www3.epa.gov/region9/air/reclaim/> [<https://perma.cc/4MLJ-6TPV>] (“RECLAIM has the longest history and practical experience of any locally designed and implemented air emissions cap and trade [CAT] program.”); Alan Ramo, *The California Offset Game: Who Wins and Who Loses?*, 20 HASTINGS W.-NW. J. ENVTL. L. & POL’Y, no. 1, Winter 2014, at 109, 110, 145–46 [hereinafter Ramo] (explaining linkage between California’s offset program and those in other states and countries). *E.g.*, SCOPING PLAN UPDATE, *supra* note 3.

global model for *successful* climate change efforts,⁵ it must first refine existing programs to ensure responsible regulatory authorities⁶ enforce statutory parameters on emissions.⁷

A series of recent cases illustrates the lack of demonstrable reductions in GHG emissions from regulated sources under California’s climate change legislation. These matters challenged different, but interrelated, aspects of CARB’s cap-and-trade policies to reduce GHGs under the California Global Warming Solutions Act of 2006, also known as Assembly Bill 32 (AB 32).⁸

Among the myriad of justifications necessitating a workable regulatory framework to reduce emissions, two are most crucial. First, because California’s climate policy is at least perceived a global exemplar, it is necessary to ensure the programs, compliance methodologies, and authorities deputized with such a significant task are the proper mechanisms to do so.⁹ Second, anthropogenic climate change—which is largely attributable to GHG emissions—is occurring at an unprecedented rate with devastating effects projected to exacerbate each year.¹⁰ Policies must, therefore, provide practicable methods to monitor emissions as well as avenues to guarantee compliance and enforcement beyond mere discretionary statutory guidelines.¹¹

5. SCOPING PLAN UPDATE, *supra* note 3, at ES-1. See also OFF. OF GOV. EDMUND G. BROWN JR., *Governor Brown to Participate in the United Nations, Climate Week NYC and Yale Climate Conference Events, Meet with Premiers of Quebec and Ontario Canada Next Week* (Sept. 15, 2017), <https://www.gov.ca.gov/news.php?id=19958> [<https://perma.cc/JWA6-MGSR>].

6. CARB creates and implements most GHG reduction programs in California, though other agencies like the California Public Utilities Commission (CPUC) and California Energy Commission (CEC), also play supportive roles in developing these policies. See *infra* note 11.

7. Ramo, *supra* note 4, at 146 (“There are serious issues as to whether California will be able to provide [assurance] that [offsets are rewarded for real, additional, and permanent reductions].”).

8. Global Warming Solutions Act, AB 32, Gen. Assembly, 2005-2006 Reg. Sess. § 38510 (Cal. 2006) (codified at CAL. HEALTH & SAFETY CODE §§ 38500–38599 (Deering 2018)).

9. SCOPING PLAN UPDATE, *supra* note 3, at 10–12. See also Andy Coghlan & Danny Cullenward, *State Constitutional Limitations on the Future of California’s Carbon Market*, 37 ENERGY L.J. 219, 222 (2016) [hereinafter Coghlan & Cullenward] (“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 sub-national climate policy structures throughout the world”).

10. CAL. AIR RES. BD., CALIFORNIA’S 2017 CLIMATE CHANGE SCOPING PLAN: THE STRATEGY FOR ACHIEVING CALIFORNIA’S 2030 GREENHOUSE GAS TARGET 6 (2017) (citing J. Cook, et al., *Consensus on Consensus: A Synthesis of Consensus Estimates on Human-caused Global Warming*, ENVTL. RES. LETTERS (Apr. 13, 2016), 11:048002 doi:10.1088/1748-9326/11/4/048002, iopscience.iop.org/article/10.1088/1748-9326/11/4/048002 [<https://perma.cc/UWZ3-84XG>]).

11. California’s climate change laws consistently contain broad grants of discretion to CARB concerning what policies to adopt and related program-compliance methods. See

II. CALIFORNIA’S REGULATORY SCHEME

California’s legislature adopted statutes that provide CARB with several options through which to regulate GHG emissions. CARB ultimately elected to implement a cap-and-trade scheme, which “provides the only direct constraint on exiting power plant emissions,” although its own Environmental Justice Advisory Committee (EJAC) advised against it.¹²

A. Cap-and-Trade: The Economic Model for Carbon Regulations in AB 32

AB 32 established the statewide goal of reducing GHG emissions to 1990 levels by 2020 and beyond.¹³ It created a multi-sector emissions cap and emissions allowances that decline over the life of the program.¹⁴ The Legislature designated CARB as the lead, “agency charged with monitoring and regulating sources of emissions of [GHGs] that cause global warming in order to reduce emissions of [GHGs].”¹⁵ CARB is responsible for, among other things, creating and adopting regulations, “to achieve the maximum technologically feasible and cost-effective [GHG] emission reductions from sources or categories of sources.”¹⁶ In doing so, CARB must ensure such regulations do not involve activities that, “disproportionately impact low-income communities.”¹⁷ AB 32 also created EJAC to advise CARB in developing AB 32’s Scoping Plan and implementation methods.¹⁸

infra Parts II, III, IV (discussing statutes and litigation regarding statutory language and broad grants of discretion by the Legislature).

12. Alice Kaswan, *Climate Change and Environmental Justice: Lessons from the California Lawsuits*, 5 SAN DIEGO J. OF CLIMATE & ENERGY L. 1, 6, 9 (2014) [hereinafter Kaswan].

13. CAL. HEALTH & SAFETY CODE § 38550 (Deering 2018); Jonas Monast, *From Top-Down to Bottom-Up Climate Policy: New Challenges in Carbon Market Design*, 8 SAN DIEGO J. OF CLIMATE & ENERGY L. 175, 188 (2017) [hereinafter *Top-Down to Bottom-Up Climate Policy*].

14. CAL. HEALTH & SAFETY CODE § 38510 (Deering 2018); *Top-Down to Bottom-Up Climate Policy*, *supra* note 13, at 187.

15. CAL. HEALTH & SAFETY CODE § 38510 (Deering 2018).

16. *Id.* § 38560 (Deering 2018).

17. *Id.* § 38562(b) (Deering 2018). The Legislature also directed CARB to create a Scoping Plan on or before January 1, 2009, detailing strategies for emissions reductions with the goal of “achieving the maximum technologically feasible and cost-effective reductions of GHG emissions,” to be updated every five years. *Id.* §§ 38561(a), (h) (Deering 2018).

18. CAL. HEALTH & SAFETY CODE § 38591 (Deering 2018). EJAC is comprised of representatives from communities with the highest exposure to air pollution and impacts

The Legislature required CARB to “adopt regulations to require the reporting and verification of statewide [GHG] emissions and to monitor and enforce compliance” with the regulations by January 1, 2008.¹⁹ Additionally, by January 1, 2008, CARB was required to determine the 1990 levels of statewide GHG emissions and then use that determination as the limit to be achieved by 2020.²⁰ AB 32 further required that by January 1, 2009, CARB prepare and approve a Scoping Plan that detailed the Agency’s strategy to reduce GHG emissions to 1990 levels by 2020.²¹

The Legislature provided several guidelines for CARB to consider while it developed AB 32’s regulations. Unfortunately, many of the Legislature’s guidelines prioritized concerns that are conceptually incompatible. Thus, the resulting regulations would, in a practical effect, inevitably prioritize some interests over others.²² For example, when creating regulations, CARB shall minimize costs and maximize benefits to Californians—particularly those in low-income and disadvantaged communities.²³ In doing so, CARB must minimize leakage and administrative burdens to avoid interference with existing emissions and air quality regulations.²⁴ CARB was thus charged with creating least-cost regulations that benefit *all* Californians without disrupting current rules, while also improving methods to capture GHG emissions in order to minimize leakage and reduce aggregate emissions. Many ambiguities likely resulted from such competing directives. These ambiguities were likely exacerbated by broad grants of discretion to CARB, leaving the Agency to its devices in designing a regulatory scheme to accomplish its statutory directives. Despite such ambiguities, the Legislature expressly

of climate change. *Id.* As of this writing, there have been nineteen EJAC Meetings and nineteen EJAC Community Meetings. CAL. AIR. RES. BD., SB 32 SCOPING PLAN (Oct. 12, 2017) [hereinafter 2017 SCOPING PLAN].

19. CAL. HEALTH & SAFETY CODE § 38530(a) (Deering 2018).

20. *Id.* § 38550 (Deering 2018).

21. AB 32 specifically provides that CARB shall “prepare and approve a Scoping Plan, as that term is understood to [CARB], for achieving the maximum technologically feasible and cost-effective reductions in [GHG] emissions from sources or categories of sources of [GHGs] by 2020 . . . The plan shall identify and make recommendations on direct emission reduction measures, alternative compliance mechanisms, market-based compliance mechanisms, and potential monetary and nonmonetary incentives for sources and categories of sources that [CARB] finds are necessary or desirable to facilitate the achievement of the maximum feasible and cost-effective reductions of [GHG] emissions by 2020.” *Id.* §§ 38561(a)-(b). The Legislature also stated that “[CARB] shall evaluate the total potential costs and total potential economic and noneconomic benefits of the plan for reducing [GHGs] to California’s economy, environment, and public health, using the best available economic models, emission estimation techniques, and other scientific methods.” *Id.* § 38561(d).

22. See Ramo, *supra* note 4, at 146 (explaining how offsets attached to an environmental justice framework are skewed because each ton acquired through offsets is essentially permission to increase emissions by one ton); Kaswan, *supra* note 13, at 2–3.

23. CAL. HEALTH & SAFETY CODE § 38562(b) (Deering 2018).

24. *Id.*

authorized the use of a market-based compliance mechanism to achieve emissions limits pursuant to AB 32, perhaps forecasting the market-based framework looming in California's future.²⁵

CARB elected to enforce AB 32 through cap-and-trade in lieu of alternative market-based systems, like a CO₂ tax, which arguably warranted more consideration than policymakers offered.²⁶ Under this cap-and-trade scheme, CARB issues allowances to sources of GHG emissions regulated under AB 32.²⁷ Allowances permit sources to emit specified quantities of GHGs and to trade any permitted quantities it does not plan to emit with other regulated sources.²⁸ Sources may also bid for additional allowances at quarterly auctions conducted by CARB.²⁹ CARB's emissions auctions produce considerable revenue,³⁰ and the funds collected at allowance

25. See CAL. HEALTH & SAFETY CODE § 38562(c); *id.* § 38570(a) (Deering 2018). See also *Cal. Chamber of Commerce v. St. Air Res. Bd.*, 10 Cal. App. 5th 604 (Apr. 6, 2017), *rev. denied*, No. S241948, 2017 Cal. LEXIS 4991 (June 28, 2017); *Our Children's Earth Found. v. St. Air Res. Bd.*, 234 Cal. App. 4th 870, 876–77 (2015).

26. The Legislature provided that CARB's market-based compliance mechanism could be either:

- (1) A system of market-based declining annual aggregate emissions limitations for sources or categories of sources that emit [GHGs, or] (2) [GHG] emissions exchanges, banking, credits, and other transactions, governed by rules and protocols established by the state board, that result in the same greenhouse gas emission reduction, over the same time period, as direct compliance with a [GHG] emission limit or emission reduction measure adopted by the state board pursuant to this division.

CAL. HEALTH & SAFETY CODE § 38505(k) (Deering 2018). See also Joanna D. Malaczynski & Timothy P. Duane, *Reducing Greenhouse Gas Emissions from Vehicle Miles Traveled: Integrating the California Environmental Quality Act with the California Global Warming Solutions Act*, 36 *ECOLOGY L. Q.* 71, 87–88 n.96 (2009) (explaining the little discussion and consideration policy makers devoted to potentially “far-ranging impacts” GHG-related taxes might have on emissions).

27. CAL. HEALTH & SAFETY CODE § 38562 (Deering 2018).

28. *Id.* See also Malaczynski, *supra* note 26, at 89–90 (providing a general explanation of AB 32's cap-and-trade model); A. DANNY ELLERMAN, PAUL L. JOSKOW, DAVID HARRISON, *EMISSIONS TRADING IN THE U.S.: EXPERIENCE, LESSONS, AND CONSIDERATIONS FOR GREENHOUSE GASES 5–6* (2003) (defining key terms and features of emissions trading programs), http://web.mit.edu/globalchange/www/PewCtr_MIT_Rpt_Ellerman.pdf [<https://perma.cc/L9QZ-2557>].

29. See CAL. CODE REGS., tit.17, §§ 95911(a), (e) (Deering 2018). See also CAL. AIR RES. BD., *Auction Information*, <https://www.arb.ca.gov/cc/capandtrade/auction/auction.htm> [<https://perma.cc/XDL9-6MTE>] (providing information auction participation, bidding, and clearing prices at auction).

30. *Cal. Chamber of Commerce v. St. Air Res. Bd.*, 10 Cal. App. 5th 617, 604 (2017). Allowance auctions from 2016 through August 27, 2017, alone generated roughly \$5 billion in revenue. LEGIS. ANALYST'S OFF., 2017-18 CAP-AND-TRADE EXPENDITURE PLAN (Aug. 24, 2017), <http://www.lao.ca.gov/handouts/resources/2017/Senate-Cap-and-Trade-Expenditure->

auctions are diverted to the Greenhouse Gas Reduction Fund to be appropriated to further the purposes of AB 32.³¹

Furthermore, a regulated, “entity can also use offsets to meet a percentage of its compliance obligation under the program . . . [A]n offset is a voluntary reduction of a source that is not directly covered by the Cap-and-Trade program which is used by a [regulated] entity to comply with the program’s GHG emissions cap.”³² Sources do not receive allowance credits for an offset unless CARB determines that it is, “real, additional, quantifiable, permanent, verifiable, and enforceable.”³³

CARB initially proposed a ten percent limit on the use of offsets to meet emissions limits,³⁴ but it ultimately decided that each source may use carbon offsets to meet up to forty-nine percent of its emissions reductions.³⁵ Although CARB has already taken steps to delineate offset projects that might provide potentially legitimate offsets,³⁶ the threshold performance standards for each offset category, “would [likely] act as non-rebuttable presumptions that the activity would be real and additional.”³⁷

In the years after cap-and-trade went into effect, the Legislature acted to provide sources regulated under AB 32 with assurance that allowances

Plan-082417.pdf [<https://perma.cc/C5A3-4KJQ>] [hereinafter 2017-18 CAP-AND-TRADE EXPENDITURE PLAN]. See generally, CAL. AIR RES. BD., *California Climate Investments*, <https://www.arb.ca.gov/cc/capandtrade/auctionproceeds/auctionproceeds.htm> [<https://perma.cc/23DW-TSUQ>].

31. CAL. GOV’T CODE § 16428.8 (Deering 2018). One case below challenging AB 32 concerns auctions revenues and appropriation of funds from the Greenhouse Gas Reduction Fund and additional fees paid by regulated sources to CARB. See *infra*, Ass’n of Irrigated Residents v. St. Air. Res. Bd., 206 Cal. App. 4th 1487 (2012) (Irrigated Residents); CAL. HEALTH & SAFETY CODE § 38597 (Deering 2018). AB 32 also includes an administrative fee provision that permits CARB to:

adopt . . . a schedule of fees to be paid by the sources of [GHG] emissions regulated pursuant to this division, consistent with Section 57001. The revenues collected pursuant to this section, shall be deposited into the Air Pollution Control Fund and are available upon appropriation, by the Legislature, for purposes of carrying out this division.

CAL. HEALTH & SAFETY CODE § 38597 (Deering 2018).

32. Our Children’s Earth Found. v. St. Air Res. Bd., 234 Cal. App. 4th 870, 877 (2015) (citing AB 32).

33. 17 CAL. CODE REGS. tit. 17, § 95970(a)(1). Cf. Ramo, *supra* note 4, at 123.

34. CAL. AIR RES. BD., CLIMATE CHANGE DRAFT SCOPING PLAN DISCUSSION DRAFT 19 (2008), <https://www.arb.ca.gov/cc/scopingplan/document/draftscopingplan.pdf>.

35. CAL. AIR RES. BD., CLIMATE CHANGE PROPOSED SCOPING PLAN: A FRAMEWORK FOR CHANGE 37 (2008), http://www.arb.ca.gov/cc/scopingplan/document/scopingplan_document.htm [<https://perma.cc/6MME-9D6G>].

36. See generally CAL. AIR RES. BD., CAP-AND-TRADE COMPLIANCE OFFSET PROGRAM, <https://www.arb.ca.gov/cc/capandtrade/offsets/offsets.htm> [<https://perma.cc/VB7J-6ZRS>].

37. Ramo, *supra* note 4, at 126. “The [C]ARB hoped that these performance standards could shortcut project approval, minimize the intensity of project-by-project review yet assure the integrity of an offset award.” *Id.*

obtained would continue to hold “value” beyond 2020.³⁸ The California Legislature passed SB 32 in 2016, effectively extending the California Global Warming Solutions Act of 2006 through 2030.³⁹ SB 32 set a new statewide goal for GHG emissions reductions of 40 percent below 1990 levels by 2030,⁴⁰ but there were otherwise no substantive differences between AB 32 and SB 32. Instead, SB 32 is intended to build upon programs established pursuant to AB 32 by achieving new goals set for 2030 and is, “designed specifically to continue California’s leadership in the fight against climate change.”⁴¹

The Legislature solidified California’s commitment to the cap-and-trade regime in 2017 when it passed AB 398 by a two-thirds supermajority vote.⁴² Other recently passed laws, and those likely to pass in the near future, will likely be significant additions to California’s climate change regulatory framework.⁴³

38. The Legislature only provided in AB 32 that the program was to run until 2020, with emissions reduction efforts to subsist after the program expired—there was no indication that allowances would have worth beyond 2020. *See* CAL. AIR RES. BD., ASSEMBLY BILL 32 OVERVIEW: WHAT IS THE TIMELINE FOR IMPLEMENTING AB 32, <https://www.arb.ca.gov/cc/ab32/ab32.htm> [<https://perma.cc/73WN-84VA>].

39. S.B. 32, 2015-2016 Reg. Sess. (Cal. 2016), https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB32 [<https://perma.cc/C63Q-EGSQ>].

40. *See* CAL. HEALTH & SAFETY CODE §§ 38501(h), 38566 (2016) (“In adopting rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions authorized by this division, the state board shall ensure that statewide greenhouse gas emissions are reduced to at least 40 percent below the statewide greenhouse gas emissions limit no later than December 31, 2030.”). SB 32 was the codified product of Executive Order B-30-15 which established the goal of 40 percent reduction in 1990 GHG emissions levels by 2030. *See* CAL. AIR RES. BD., *Public Workshop 2017: Scoping Plan Update, The Proposed Strategy for Achieving California Greenhouse Gas Target* (Oct. 12, 2017), <https://www.arb.ca.gov/cc/scopingplan/meetings/101217/sp-october-workshop-slides.pdf>.

41. SCOPING PLAN UPDATE, *supra* note 3, at 40. SB 32’s Scoping Plan Update was created with “guidance” from several state agencies, departments, and public comment, and EJAC. *Id.* at ES-1-2, 21-25.

42. CAL. HEALTH & SAFETY CODE §§ 38562, 38590, 38591.1–38591.3, 38592.5 (Deering 2018) (available at https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180AB398 [<https://perma.cc/CV9Z-W3TC>]).

43. *See* S.B. 375, The Sustainable Communities and Climate Protection Act of 2008 (2007–2008 Reg. Sess.), CAL. GOV’T CODE § 65080(b)(2)(A)(iv) (requiring CARB to update regional GHG reduction targets every eight years consistent with the time in which regional metropolitan planning organizations (MPOs) must update regional transportation plans under federal law, before MPOs submit a “sustainable communities strategy” to CARB. CARB may revise GHG targets every four years if alternative plans that would reduce GHGs in the affected regions). Although SB 32 is the future of GHG regulations in California, it is not operative until AB 32 expires in 2020. SB 32 is intended to extend

III. STATUTORY CONSTRUCTION GRANTS BROAD DISCRETION TO CARB UNDER AB 32, THE CALIFORNIA GLOBAL WARMING SOLUTIONS ACT OF 2006

The Legislature directed CARB to design methodologies to reduce statewide GHG emissions under least-cost, maximum-benefit strategies that ultimately create the greatest net environmental and economic benefits to the state.⁴⁴ On their face, these directives instruct CARB to produce regulations that achieve competing objectives. CARB's regulations must improve air quality and citizens' health, but only to the extent that it is economical—a timeless balance of environmental *and* fiscal interests⁴⁵ would lead to dissatisfaction among the stakeholders. Many agree that the environmental justice community was reasonably frustrated when AB 32 left virtually no avenues to ensure that CARB abides by the directive to develop policies that seek to benefit—or at least improve—emissions impacts on low-income and disadvantaged communities (DACs).⁴⁶

A. Language of the Enabling Statute Effectuates Agency Authority

CARB's authority under AB 32 is a function of the language used by the Legislature to authorize agency action. California law provides that when a statute grants quasi-legislative authority to an agency, it effectively delegates *legislative power* to that agency.⁴⁷ Thus, regulations established by an agency pursuant to quasi-legislative statutory directives have the effect of substantive law. When legislatures fail to provide parameters, or when those provided are extremely broad, questions of abuse of discretion logically accompany an agency's interpretation of a particular statute.

the purpose and general structure of AB 32, so the remainder of this Article will focus on litigation around AB 32 and related theories which will likely subsist through 2020.

44. CAL. HEALTH & SAFETY CODE § 38501(h) (“It is the intent of the Legislature that the [CARB] design emissions reduction measures to meet the statewide emissions limits for [GHGs] established pursuant to this division in a manner that minimizes costs and maximizes benefits for California’s economy . . . maximizes additional environmental and economic co-benefits for California, and complements the state’s efforts to improve air quality.”).

45. *Id.* § 38501(e) (explaining that California’s leadership in climate change policy will benefit the state’s economy, financial institutions, and businesses); *id.* § 38570(b)(3) (requiring CARB to “maximize additional environmental and economic benefits for California, as appropriate”).

46. *See id.* §§ 38565, 38562(b)(2); Kaswan, *supra* note 12, at 3–5 (“The explicit attention to environmental justice considerations throughout the statute undoubtedly created expectations within the environmental justice community that their concerns would play a key role in the statute’s implementation.”).

47. *Yamaha Corp. of Am. v. St. Bd. of Equalization*, 960 P.2d 1031, 1034 (Cal.4th 1998) (emphasis added).

The Legislature gave CARB *the option* to adopt cap-and-trade to regulate statewide GHG emissions reductions.⁴⁸ AB 32 specifically states that:

[CARB] *may* adopt a regulation that establishes a system of market-based declining annual aggregate emissions limits for sources or categories of sources that emit [GHG] emissions, applicable from January 1, 2012, to December 31, 2020 . . . that [CARB] *determines will achieve* . . . reductions in [GHG] emissions, in the aggregate, from those sources or categories of sources.⁴⁹

This directive represents the Legislature’s acquiescence for CARB to create market-based regulations but in no way required the Agency to do so. The cap-and-trade program was largely the result of former Governor Schwarzenegger’s Executive Order promulgated in 2006, which effectively directed CARB to develop market-based regulations for AB 32.⁵⁰

Furthermore, the Legislature consistently used the word “shall” when it granted CARB’s authority to use a market-based compliance mechanism.⁵¹ The Legislature’s use of “shall”—instead of language like “must” or “will”—indicates a discretionary consideration whereby CARB *may* create regulations that meet these statutory parameters.⁵² Similar non-obligatory directives are used by parties to international agreements to deliberately avoid imposing binding obligations on sovereign states.⁵³ The practical effect of such language permits sovereigns to devote as much or as little consideration to achieving

48. See Kaswan, *supra* note 12, at 4–5.

49. CAL. HEALTH & SAFETY CODE § 38570(a) (West 2018) (emphasis added). See also *id.* § 38562(c).

50. See Kaswan, *supra* note 12, at 4–6. Because the environmental justice committee resisted against including “must” in AB 32, the Legislature instead included “may” to avoid a legally mandatory market-based program. *Id.* As a result, Governor Schwarzenegger passed Executive Order No. S-20-06 to establish a “Market Advisory Committee” to guide state agencies in developing a market-based compliance program, i.e., cap-and-trade. See Exec. Order No. S-20-06 (Oct. 18, 2006). See also MKT. ADVISORY COMM. TO THE CAL. AIR RES. BD., *Recommendations for Designing a Cap-and-Trade System for California* (2007), <http://www.arb.ca.gov/cc/ejac/proposedplan-ejacommentfinaldec10.pdf> [<https://perma.cc/HR66-TJAU>].

51. *Id.* §§ 38570–38574 (Deering 2018). “Shall” appears in several provisions of both AB 32 and SB 32. *Id.*; S.B. 32, *supra* note 39.

52. Cf. Malaczynski, *supra* note 26, at n.241 (arguing that a word like “can” provides agencies with more discretion in fulfilling statutory obligations than words like “shall” and “must”).

53. See, e.g., U.N. Framework Convention on Climate Change, *Adoption of the Paris Agreement*, Art. 4.2, U.N. Doc. FCCC/CP/2015/L.9/Rev.1 (Dec. 12, 2015) (“Parties *shall* pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions.”) (emphasis added). The Paris Agreement is available at <https://unfccc.int/resource/docs/2015/cop21/eng/109r01.pdf> [<https://perma.cc/8PY2-7UR3>].

goals of international agreements, just as CARB is not obligated to promulgate regulations that satisfy all parameters.

Accordingly, some sections that include “shall” also contain language that grant broad authority. For example, section 38562 subsection (b) concerns allowance auctions and provides that:

. . . . [i]n adopting regulations . . . to the extent feasible and in furtherance of achieving the statewide [GHG] emissions limit, [CARB] *shall* do all of the following: (1) Design the regulations, including distribution of emissions allowances *where appropriate*, in a manner that is equitable, seeks to minimize costs and maximize the total benefits to California, and encourages early action to reduce greenhouse gas emissions.⁵⁴

This section provides CARB with authority to implement an allowance distribution system and exceptionally broad guidelines to design it. Because the Legislature left the system design to CARB’s discretion but suggested the equitable, allowance-based system, it fundamentally authorized allowance auctions.⁵⁵ AB 32 further provides that CARB’s regulations must guarantee that, “reductions achieved are *real, permanent, quantifiable, verifiable, and enforceable* by [CARB].”⁵⁶ Unsurprisingly, CARB also has authority over methodologies to determine whether reductions are real, permanent, quantifiable, verifiable, and enforceable.⁵⁷ Under this authority, CARB alone sets threshold performance standards and baselines against which all regulated emissions are measured.⁵⁸

In other provisions of AB 32, the Legislature provides CARB with numerous, often competing “directives” and leaves achievement methods entirely to the agency.⁵⁹ Thus, when left to evaluate many factors, CARB is not held responsible for ensuring that all delegated goals are achieved.⁶⁰ This issue is perhaps most salient in the offset provisions of statute, which provide that any offset project undertaken by a regulated source to offset its own emissions must be “additional,” in that the emissions reduction is

54. CAL. HEALTH & SAFETY CODE § 38562(b) (Deering 2018) (emphasis added).

55. Ramo, *supra* note 4, at 111–12 (citing CAL. HEALTH & SAFETY CODE § 38561(b)). *See, e.g.*, Cal. Chamber of Commerce v. St. Air Res. Bd., 10 Cal. App. 5th 604, 619 (2017) (concluding in reference to allowance auctions “the Legislature conferred on the [CARB] *extremely broad discretion* to craft a distribution system”) (emphasis added).

56. *Id.* § 38562(d)(1) (emphasis added).

57. *Id.*

58. *See* Ramo, *supra* note 4, at 126 (“The threshold performance standards would act as nonrebuttable presumptions that the activity would be real and additional. CARB hoped that these performance standards could shortcut project approval, minimize the intensity of project-by-project review yet assure the integrity of an offset award.”).

59. *See* CAL. HEALTH & SAFETY CODE §§ 38562(b), (c).

60. *See* Citizens Climate Lobby v. Cal. Air Res. Bd., Statement of Decision CGC-12-519554 (Statement of Decision) (Jan. 25, 2013) (“The Legislature delegates authority to agencies to promulgate using their best judgement based on the current available information.”).

not one that “otherwise would occur” under a business-as-usual scenario.⁶¹ The Legislature defines “conservative business-as-usual” for additionality determinations as a scenario that is, “more likely than not to understate net GHG reductions.”⁶² This issue is ripe for litigation because the Legislature only vaguely describes additionality standards, which renders CARB’s responsibility to police offsets⁶³ highly problematic.

The Legislature delegated almost indeterminable amounts of discretion to CARB.⁶⁴ However, the most troublesome discretionary grants exist in the enforcement and compliance provisions of California’s regulatory framework. As seen in cases below, the intermixing of language that appears obligatory with broad grants of discretion provides the agency with peak authority.

B. Quasi-Legislative Regulations Provide an Agency with Lawmaking Power⁶⁵

As discussed above, quasi-legislative regulations are rules created by regulatory agencies pursuant to authority granted by the Legislature.⁶⁶ The concept is best summarized as follows:

[B]ecause agencies granted . . . substantive rulemaking power are truly “making law,” their quasi-legislative rules have the dignity of statutes. When a court assesses the validity of such rules, the scope of review is narrow. If satisfied that the rule . . . lay within the lawmaking authority delegated by the Legislature, and that it is reasonably necessary to implement the purpose of the statute, judicial review is at its end.⁶⁷

However, when the Legislature delegates power to an agency to interpret key statutory terms, the judicial scrutiny applied to determine the scope of

61. Requirements for Offset Projects Using ARB Compliance Offset Protocols, CAL. CODE REGS. tit. 17, § 95973 (Deering 2018). “Any” reduction additional to what would otherwise occur under a business-as-usual scenario delineates no preciseness or accountability for CARB’s methods. CAL. HEALTH & SAFETY CODE § 35862(d)(2); Ramo, *supra* note 4, at 110–11.

62. CAL. CODE REGS. tit. 17, § 95802(a)(58) (Deering 2018).

63. *E.g.*, CAL. CODE REGS. tit. 17, §§ 95977.1, 95983, 96014 (2017) (emphasis added).

64. *See* CAL. HEALTH & SAFETY CODE § 38561(a) (Deering 2018) (“ . . . [CARB] shall prepare and approve a scoping plan, *as that term is understood by the* [CARB], for achieving the maximum technologically feasible and cost-effective reductions. . .”) (emphasis added).

65. *E.g.*, *Am. Coating Ass’n, Inc. v. S. Coast Air Quality Dist.*, 54 Cal. 4th 446, 460 (2012).

66. *See supra* text accompanying notes 48–49.

67. *Yamaha Corp. of Am. v. St. Bd. of Equalization*, 960 P.2d 1031, 1036 (Cal. 4th 1998).

this interpretive authority is viewed along a continuum—with nonreviewability (more deferential) at one end and independent judgment (little to no agency deference) at the other.⁶⁸ California courts will infer that the Legislature intended to grant interpretive authority when a statute uses broad language to provide an agency with rulemaking authority.⁶⁹ Courts must therefore determine, “whether the agency regulation is within the scope of the authority conferred . . . [which] includes an inquiry into the extent to which the Legislature intended to delegate discretion to the agency to construe or elaborate on the authorizing statute.”⁷⁰

In such instances, California courts analyze whether the “instant interpretation falls within the agency’s delegated lawmaking authority.”⁷¹ If a court finds that the agency was in delegated interpretive authority by the Legislature such that the regulation is consistent with the statute, the court then applies an arbitrary and capricious standard of review⁷² to determine, “whether the regulation is reasonably necessary to effectuate the enabling statute’s purpose.”⁷³ In reviewing the agency’s exercise of discretion, “the scope of review is limited out of deference to the agency’s authority and presumed expertise . . . [and] the court must ensure that an agency has adequately considered all relevant factors, and has demonstrated a rational connection between those factors, the choice made, and the purposes of the enabling statute.”⁷⁴

68. *Id.* at 1033. This standard originated in *Chevron, U.S.A., Inc. v. Natural Resources Defense Council et al.* when the Supreme Court decided the United States Environmental Protection (EPA) had interpretive authority under certain provisions of the Clean Air Act. 467 U.S. 837 (1984). After *Chevron*, courts must defer to the policy judgments of executive agencies, like the EPA, when a statute is either ambiguous or appears to provide the agency with authority to interpret statutory text and effectuate the purposes of the legislation as the agency sees fit. *Id.* See e.g., Antonin Scalia, *Judicial Deference to Administrative Interpretations of Law*, 3 DUKE L.J. 511, 514 (1989) [hereinafter Scalia].

69. *Yamaha* 960 P.2d at 1041 (Mosk, J., concurring). In contrast, the Legislature’s use of specific or comprehensive or language provides agencies with little discretion. *Id.*

70. *Id.* (internal quotations omitted).

71. *Citizens Climate Lobby v. Cal. Air Res. Bd.*, No. CGC-12-519554, 2013 Cal. Super LEXIS 7826, at *36 (Jan. 25, 2013) (citing *Am. Coatings Ass’n*, 54 Cal. 4th 466 (2012); *Ramirez v. Yosemite Water Co., Inc.*, 20 Cal. 4th 785 (1999); *Moore v. Cal. St. Bd. of Accountancy*, 2 Cal. 4th 999 (1992)). This is the first step of the *Yamaha* Doctrine, a judicial doctrine used to analyze actions of administrative and regulatory agencies. See *Yamaha*, 960 P.2d at 1036–37.

72. See *id.* at 1031–46 (holding the arbitrary and capricious standard of judicial review provides extraordinary deference to the agency’s interpretation of its statutorily granted authority).

73. *Citizens Climate Lobby*, 2013 Cal. Super LEXIS 7826, at *37 (citing *Communities for a Better Env’t v. Cal. Res. Agency*, 103 Cal. App. 4th 98, 108 (2002)).

74. *Id.* (quoting *Am. Bd. of Cosmetic Surgery v. Med. Bd. of Cal.*, 162 Cal. App. 4th 534, 547–48 (internal quotation marks omitted) (2008)).

In California, a regulation is valid if it is: “(1) consistent and not in conflict with the statute and (2) reasonably necessary to effectuate the purpose of the statute.”⁷⁵ This analysis is the codified version of the *Yamaha* Doctrine, a judicial doctrine invoked when a claimant challenges the actions or regulations of an administrative agency. As long as the first prong is within the scope of the authority conferred in the statute, then an administrative regulation is valid.⁷⁶ After the court determines the regulation is valid, it moves to the second prong which affords even more deference to the agency. Under the second prong, a court will strike down a regulation as invalid only if it is, “arbitrary, capricious, or without reasonable or rational basis.”⁷⁷ Given the statutory authorities granted to CARB, the arbitrary and capricious standard of judicial review has proven exceptionally easy for the agency to overcome in cases challenging its implementation of AB 32.

IV. BROAD GRANTS OF DISCRETION THWART JUDICIAL ENFORCEMENT OF AB 32

A. Cases Challenging CARB’s Regulations Under AB 32

No cases that challenged CARB’s authority under AB 32 ever reached the merits of the allegations. Instead, courts have focused on whether the judiciary should play a role in assessing challenges to CARB’s authority, as the Legislature statutorily dedicated to the agency the authority to make policy judgments concerning AB 32’s implementation. Under *Yamaha*, the agency, not the court, is in the best position to determine how AB 32 goals are achieved. Because courts refrain from invading the technical expertise of the agency, CARB may determine whether offsets are real, verifiable, and additional or whether allowance auctions are necessarily authorized under AB 32.⁷⁸

The first case involving a challenge to CARB’s methodologies implementing AB 32 was *Association of Irrigated Residents v. State Air Resources Board*.⁷⁹

75. CAL. GOV’T CODE § 11342.2 (Deering 2018); *Yamaha Corp. of Am. v. St. Bd. of Equalization*, 960 P.2d 1031 (Cal. 4th 1998).

76. *Cal. Chamber of Commerce v. St. Air Res. Bd.*, 10 Cal. App. 5th 604, 619 (citing *Morningstar Co. v. St. Bd. of Equalization*, 201 Cal. App. 4th 737, 744–45 (2011)).

77. *Morning Star*, 201 Cal. App. 4th at 744–45.

78. *See Yamaha*, 960 P.2d at 1031; *Cal. Chamber of Commerce*, 10 Cal. App. 5th at 604.

79. 206 Cal. App. 4th 1487 (2012). *See Ramo, supra* note 4, at 142 (“In the first case squarely addressing the implementation of AB 32 . . .”).

Environmental groups challenged different aspects of the 2008 Scoping Plan CARB published to demonstrate the Agency’s implementation plans for AB 32 regulations. Petitioners alleged the Scoping Plan failed to comply with statutory requirements of AB 32, particularly the mandate requiring CARB to consider health impacts to communities located near regulated sources.⁸⁰ The court rejected Petitioners’ argument under *Yamaha*, holding that CARB did not act arbitrarily or capriciously in crafting the Scoping Plan and, contrary to Petitioner’s argument, CARB did not ignore statutory requirements.⁸¹ Instead, the challenged provisions of AB 32 were held to be “exceptionally broad and open-ended,” which left, “virtually all decisions to the discretion of [CARB].”⁸²

B. Broad Deference, or Limitless Deference?

Then in 2012, two environmental groups challenged CARB’s offset approval methodologies in *Citizens Climate Lobby v. California Air Resources Board*.⁸³ The groups challenged CARB’s “additionality” methodology. However, Petitioners’ argument was problematic because it required proving

80. Ass’n of Irrigated Residents, 206 Cal. App. 4th at 1489, 1504. See S.B. 535, ch. 830 Stats. of 2012 (Cal. 2012), https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201120120SB535

81. Petitioner challenged whether CARB ignored guidelines to adopt the most cost-effective and economically-feasible mechanisms to achieve GHG reductions. Irrigated Residents, 206 Cal. App. 4th at 1495–97.

82. *Id.* at 1495 (“The Board is directed to ‘consult with all state agencies with jurisdiction over sources of greenhouse gases’ and to receive public input, to ‘consider all relevant information pertaining to [GHG] emissions reduction programs’ in other jurisdictions, to ‘evaluate the total potential costs and total potential economic and noneconomic benefits of the plan . . . to California’s economy, environment, and public health, using the best available economic models, emission estimation techniques, and other scientific methods’ and, ultimately, to ‘identify and make recommendations on direct emission reduction measures, alternative compliance mechanism[s], market-based compliance mechanisms, and potential monetary and nonmonetary incentives for sources and categories of sources that the [Board] finds are necessary and desirable to facilitate the achievement of the maximum feasible and cost-effective reductions of greenhouse gas emissions by 2020.’ These directives are exceptionally broad and open-ended. They leave virtually all decisions to the discretion of the Board, from determining the nature of a scoping plan, to determining the best available research techniques, to determining incentives for emissions reduction that are ‘necessary and desirable,’ to weighing economic, environmental and public health benefits, to determining what is most ‘feasible and cost-effective.’”) (second italics added). See *Our Children’s Earth Found. v. Cal. Air Res. Bd.*, 234 Cal. App. 4th 870, 888 (2015).

83. *Citizens Climate Lobby v. Cal. Air Res. Bd.*, No. CGC-12-519554, 2013 Cal. Super LEXIS 7826, at *10 (Mar. 25, 2013). The trial court explained the “[a]dditionality is essential to the environmental integrity of an offset program because if reductions are not additional, then the cap-and-trade program will not reduce GHG emissions beyond what would have occurred anyway . . . [and non-additional offsets] undercut[] the cap-and-trade program because [they] substitute[] illusory reductions, those that would have occurred anyway, for real reductions that the capped sources should have undertaken.” *Id.*

that something would have happened without an offset, i.e., a conservative business-as-usual scenario, which is generally a debatable concept.⁸⁴ Because Offset Protocols assume a “standard additionality mechanism” in each offset circumstance, CARB’s protocols assume a behavior. This, as Petitioners argued, will produce skewed offsets and additionality measurements because it would result in CARB accepting any offset where the activity exceeds a standard performance in that particular activity.⁸⁵ The District Court essentially rejected Petitioners’ arguments on grounds that Petitioners’ “project-based” approach, i.e., for CARB to evaluate each offset individually, was just as problematic and uncertain as CARB’s “standards-based” approach to offsets, in regards to accurately proving offset data.⁸⁶

Next, in *Our Children’s Earth Foundation v. State Air Resources Board*,⁸⁷ Petitioners again challenged CARB’s standards-based approach.⁸⁸ The court ultimately reasoned the offset program at most provides a “more likely than not” assurance, but that, “each offset protocol also explicitly requires compliance with the additionality requirements in the regulation.” In other words, the cap-and-trade program regulation establishes a standards-based mechanism to ensure GHG emission reductions that generate offset credits are *in addition to* reductions that would otherwise occur, and the offset protocols are an integral part of that mechanism. Because “[CARB] has statutory authority to establish a market-based compliance mechanism which employs a standards-based approach for ensuring additionality, it did not exceed that authority by using standards-based protocols to implement that mechanism.”⁸⁹

84. See Kaswan, *supra* note 12, at 17 (“Determining whether reductions are ‘additional’ is an inherently challenging enterprise because it requires assessing what would have happened in the absence of the offset program, always a matter of debate.”).

85. *Id.* at 17 (explaining why CARB’s presumptions in each offset protocol create a “undercutting” issues that the discussed). See *infra* note 86.

86. *Id.* at 18 (citing *Citizen’s Climate Lobby*, 2013 Cal. Super LEXIS 7826, at *11). See also *id.* (“The Court held that individual project assessments are equally problematic given the difficulty of assessing future emissions and future behavior on a project-by-project basis. It observed that offset programs engaged in project-based assessments, like the Kyoto Protocol’s Clean Development Mechanism, had encountered numerous inaccuracies, difficulties, and costs that rendered them as or more uncertain than CARB’s chosen standards-based approach. The Court stated that its role was not ‘to decide that one methodology trumps another when decisions are made based on extensive research, stakeholder input, public input, and fact-based analysis.’”).

87. 234 Cal. App. 4th 870 (2015).

88. *Id.* at 889.

89. *Id.* at 890.

The court rejected Petitioners' arguments that the standards-based approach violated AB 32⁹⁰ because not only does CARB have authority to craft additionality assessments as it sees fit, but Petitioners' proffered alternative—the performance-based approach—was equally as unsatisfying in its accuracy of offset measurements.⁹¹

It is, however, worth noting the court's final word in its rejection of Petitioners' performance-based approach: "Appellant's theory when taken to its logical conclusion is that there is no approach which can establish that an offset is additional because the 2006 Act demands a degree of certainty that can never be satisfied."⁹² Thus, the court rejected an alternative methodology to CARB's selected protocol on the grounds that *both* were unverifiable. This is not a welcome justification in most fields, let alone the climate change realm, which prioritizes scientific certainty more than most.

Then in *California Chamber of Commerce v. State Air Res. Bd.*⁹³ in 2017, a California citizen filed suit against CARB in the hopes of invalidating AB 32's allowance auctions. Many of Petitioners' arguments focused on the breadth of the statute and the lack of specific authorization from the Legislature to conduct the auctions without first obtaining the two-thirds supermajority required to pass regulations that qualify as taxes under Proposition 26.⁹⁴ Proposition 26 amended the California Constitution in 2010 to provide that any changes in state statutes resulting in a higher tax—defined as "any levy, charge, or exaction of any kind imposed by the

90. See Citizen's Climate Lobby, 2013 Cal. Super LEXIS 7826, at *37–38 ("Petitioners urge the court to find that standards-based approaches to additionality are impermissible because they enlarge the Act's scope by making non-additional reductions eligible for offset credits . . . [Petitioners] contend an arbitrary and capricious standard applies because [CARB] was delegated the authority to interpret additionality.") The court found the Act contained "'exceptionally broad and open-ended' sections that leave 'virtually all decisions to the discretion of [CARB]'" because the Legislature included nine factors to consider in creating a comprehensive regulatory program to reduce GHG emissions. *Our Children's Earth Found.*, 234 Cal. App. 4th at 875, 888 (citing *Ass'n of Irrigated Residents v. St. Air Res. Bd.*, 206 Cal. App. 4th 1787, 1495 (2012)).

91. *Id.* at 890 ("Second, appellant's conception of a 'performance standards-based approach,' which 'ensures that no project that would otherwise occur would be allowed to generate offset credits,' incorporates the same unworkable definition of the statutory requirement.").

92. *Id.*

93. 10 Cal. App. 5th 604 (2017). Prior history of this consolidated case includes *Morning Star*, where a state trial court accepted the state's argument that allowance auctions were valid "regulatory fees" and not taxes under *Sinclair Paint v. State Board of Equalization* and Proposition 13 of the California Constitution. *Morning Star Co. v. Bd. of Equalization*, 201 Cal. App. 4th 737 (2011); Coghlan & Cullenward, *supra* note 9, at 221–22. See also *Sinclair Paint v. St. Bd. of Equalization*, 15 Cal. 4th 866, 881 (1997).

94. Cal. Chamber of Commerce, 10 Cal. App. 5th at 621.

State” with specified exceptions—must pass a two-thirds supermajority vote in the state Legislature.⁹⁵

The *California Chamber of Commerce* court stated that legislative silence on holding allowance auctions did not prevent CARB from holding the auction.⁹⁶ Rather, because AB 32 provides, “*explicit* delegation to [CARB] to design a method to distribute allowances . . . [the] agency exercise[d] discretion explicitly conferred on it, [and] it is presumed to act within legislative intent.”⁹⁷ The court further explained that the agency, not the court, is in the best position to determine how legislatively delegated objectives are achieved, including whether to hold the allowance auctions.⁹⁸

The court rejected Petitioners’ “breadth” argument, reasoning that AB 32’s language is broad enough to encompass the emissions allowances and the accompanying allowance auctions. The court explained, “the auction regulations are ‘consistent and not in conflict with’ the organic statute,” as required under *Yamaha*.⁹⁹ When the court rejected Petitioners’ argument that CARB must receive explicit authorization from the Legislature to adopt regulations to hold emissions auctions under the cap-and-trade program, it did so based on an inference.¹⁰⁰ The court inferred the Legislature’s broad allocation of authority reflected a desire for CARB to create, “a massive, historic, and immediate change in behavior regarding GHG emissions . . . [so] the lack of explicit legislative discussion of one subcomponent of one *possible* emissions reduction system (that is, adoption of a cap-and-trade

95. CAL. CONST., art. XIII A, §§ 3(a)–(b).

96. Cal. Chamber of Commerce, 10 Cal. App. 5th at 625–26.

97. *Id.* at 620.

98. *Id.* at 626.

99. *Id.* at 620 (quoting *Morning Star*, 201 Cal. App. 4th at 747).

100. Cal. Chamber of Commerce, 10 Cal. App. 5th at 613–22. The reviewing court reasoned against all of the following challenges that petitioners brought against CARB’s emissions auctions:

(1) the statute does not explicitly authorize [CARB] to auction allowances; (2) the legislative history includes no discussion of the term ‘auction;’ (3) at the time of AB 32’s enactment, most cap-and-trade program allowances were distributed for free; (4) construing AB 32 as authorizing the sale of allowances renders administrative fee provision of the Act ([§] 38597) surplusage; (5) the chief sponsor of AB 32 (ostensibly) assured his colleagues on the floor of the Legislature, just before the vote, that the only funds to be generated under AB 32 were those generated by the administrative fee provision; (6) there is no guidance in AB 32 as to how to spend any auction revenues; and (7) the Legislature failed to enact a bill in 2009 that would have expressly authorized [the Board] to auction the allowances.

Id. (quoting *Our Children’s Earth Found. v. Cal. Air Res. Bd.*, 234 Cal. App. 4th 870, 877 (2015)).

program rather than a command-and-control program) is of no moment.”¹⁰¹ The court also rejected Petitioner’s argument that administrative fees under section 38597 of the Act¹⁰² precluded CARB from generating further revenue through another mechanism, reasoning that section 38597 is merely a “pedestrian measure” to fund administrative costs of implementing CARB’s programs under the Act.¹⁰³ The opinion even discussed Petitioner Morning Star’s arguments regarding 2009 legislation that would have permitted the auctions used by CARB, and because the legislation did not pass, this evidenced legislative intent to disfavor the auctions.¹⁰⁴

1. *Are They Really the Experts?*

Under *Yamaha*, courts are not bound by an agency’s interpretation of its authority under a particular statute but must defer to the agency’s interpretation in a quasi-legislative regulation.¹⁰⁵ Here, the judiciary merely assumes agencies are the experts in each proceeding because the judiciary neither analyzes the pertinent data nor has experience in the subject matter with which the agency works.¹⁰⁶ “In other words, [the agency is] more likely than

101. Cal. Chamber of Commerce, 10 Cal. App. 5th at 626. The court also rejected a related argument advanced by Morning Star (a Plaintiff the from consolidated case) concerning the failure of a 2009 bill which would have provided explicit authorization—thus evidencing legislative intent—for CARB to hold allowance auctions. *See id.* at 629–30 (citing S.B. 31, Reg. Sess. 2009–2010 § 2 (Cal. 2009) (amend. 2010)). The court reasoned, “that ‘the failure of the Legislature to enact the proposed bill, in one form or another, is some evidence that the Legislature does not consider it necessary or proper or expedient to enact such legislation.’” *Id.* (quoting *Sterling v. City of Oakland*, 208 Cal. App. 2d 1, 6 (1962)).

102. Section 38597 provides CARB may create, “a schedule of fees to be paid by the sources of [GHG] emissions regulated pursuant to this division, consistent with Section 57001. The revenues collected . . . shall be deposited into the Air Pollution Control Fund and are available upon appropriation, by the Legislature, for purposes of carrying out this division.” CAL. HEALTH & SAFETY CODE § 38597 (West 2007). Section 57001 applies to many fees and requires, “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(a) (Deering 2018).

103. Cal. Chamber of Commerce, 10 Cal. App. 5th at 616 (citing CAL. CODE REGS., tit. 17, §§ 95200–95207 (Deering 2018)).

104. Morning Star argued that because CARB did not prove auction charges were not taxes under Proposition 26, the 2012 legislation ratifying auction regulations was barred by Proposition 26. *See* Cal. Chamber of Commerce, 10 Cal. App. 5th at 632–33. The court rejected this argument because the 2012 legislation did not increase any state-imposed charges, but rather it merely, “specified how the proceeds of auctions sales would be handled.” *Id.* at 633–34.

105. *Yamaha Corp. of Am. v. St. Bd. of Equalization*, 960 P.2d 1031, 1037 (Cal. 4th 1998).

106. *See* Scalia, *supra* note 68, at 515 (explaining that *Chevron* deference to administrative interpretations relies on agency expertise and practical knowledge regarding purposes of legislation at issue and how to “best effectuate those purposes.”).

the courts to reach the correct result.”¹⁰⁷ Nevertheless, courts prefer deference over advancing a challenge against CARB’s regulatory authority.¹⁰⁸

V. ALTERNATIVE MECHANISMS TO ACHIEVE GOALS OF AB 32

Case law discussed above demonstrates a trend of judicial deference to CARB. The foundation of this trend rests in California courts’ understanding that the Legislature intended to delegate to CARB the authority to regulate statewide GHG emissions and, in doing so, authorized the use of market-based regulatory mechanisms. Because precedent all but solidifies CARB’s statutory authority, these arguments will likely continue to thwart lawsuits challenging the Agency’s enforcement or its assertions that actual reductions are being achieved. This reality suggests that alternative mechanisms—other than constitutional and taxation challenges¹⁰⁹—are necessary to ensure that CARB responsibly exercises its statutory authority and obeys legislative directives to reduce statewide GHG emissions.

A. Regulatory Alternatives

GHGs should be regulated under a system that complements other statewide and, when possible, regional and national programs.¹¹⁰ Currently, favored

107. *Id.* at 514.

108. *See* Cal. Chamber of Commerce, 10 Cal. App. 5th at 626 (“[T]he Legislature chose to pass a flexible bill, with the understanding that the [CARB], *as the agency with expertise in air quality matters*, was better equipped to study [GHG emissions] and design a program to effectuate those goals.”); *Ass’n of Cal. Ins. Co.’s v. Jones*, 2 Cal. 5th 376, 390 (2017).

109. The “constitutional doubt” doctrine applies only to statutes that are susceptible to two plausible interpretations, and the doctrine does not apply to questions about delegation or Proposition 13 as they pertain to AB 32. *See* Cal. Chamber of Commerce, 10 Cal. App. 5th at 631–32. *E.g.*, *Harrott v. Cty. of Kings*, 25 Cal. 4th 1138, 1153 (2001) (“If a statute is susceptible of two constructions, one of which will render it constitutional and the other unconstitutional in whole or in part, or raise serious and doubtful constitutional questions, the court will adopt the construction which, without doing violence to the reasonable meaning of the language used, will render it valid in its entirety, or free from doubt as to its constitutionality, even though the other construction is equally reasonable. The basis of this rule is the presumption that the Legislature intended, not to violate the Constitution, but to enact a valid statute within the scope of its constitutional powers.”).

110. The Editors, Opinion, *Who Should Regulate Greenhouse Gases?*, N.Y. TIMES: ROOM FOR DEBATE BLOG (Feb. 19, 2009, 4:35 PM) [<https://perma.cc/42VJ-2TQS>]. Because GHGs have the same impact on earth’s climate regardless of the location in which they are emitted, coordinated efforts which complement other climate change policies provide streamlined and often less-costly mechanisms to attain emissions reductions. *Id.*

regulatory policies designed to reduce GHG emissions are market-based systems like cap-and-trade and CO₂ taxes on regulated sources.¹¹¹ Although the Legislature directed CARB to consider alternatives to cap-and-trade in deciding how to regulate GHG emissions, it left the decision to CARB to select the market-based mechanism through which to achieve AB 32's goals.¹¹² The ultimate question thus becomes: Is cap-and-trade the best approach to reduce GHG emissions?

For now, the answer is yes—cap-and-trade is the best mechanism to regulate GHGs. Cap-and-trade is an optimal regulatory approach because it avoids specified pricing of emissions under CO₂ tax regimes. Instead, it uses incentives to reduce GHG emissions and lets the marketplace determine costs of reductions.¹¹³ Furthermore, if reductions are more difficult to achieve than expected, consequences under cap-and-trade are more favorable than those under more rigid regulatory alternatives. Consequences under cap-and-trade include higher compliance costs with diminished production of goods or services from regulated sources, whereas consequences under a CO₂ tax include less emissions reductions when it is cheaper for regulated sources to continue emitting at current levels and pay for noncompliance rather than pay a (likely costly) tax.¹¹⁴ Additionally, a rigid regulatory approach that specifies the amount and method to reduce emissions, “would likely be far less cost-effective than a market-based approach because it would discourage technological innovation and provide no financial incentive for [sources] to reduce emissions below their required level.”¹¹⁵

Finally, cap-and-trade is linked to similar compliance programs in the United States and neighboring nations.¹¹⁶ California's program harmonizes with similar cap-and-trade systems in Québec, Ontario, British Columbia,

111. *Policy Basics: Policies to Reduce Greenhouse Gas Emissions*, CNTR. ON BUDGET & POL. PRIORITIES (Dec. 21, 2015) https://www.cbpp.org/sites/default/files/atoms/files/PolicyBasic_CapTrade.pdf [hereinafter *Policy Basics*].

112. *See supra* text accompanying notes 22–25.

113. *Policy Basics, supra* note 111. *See also* Appendix A: CAP-AND-TRADE COST-EFFECTIVE REDUCTIONS TABLE, *infra* (sourced from 2017–18 CAP-AND-TRADE EXPENDITURE PLAN, *supra* note 30, at 3).

114. *See, e.g., Policy Basics, supra* note 111, at 2 (comparing cap-and-trade, a carbon tax, and command-and-control regulatory frameworks).

115. *Id.*

116. *See* Coghlan & Cullenward, *supra* note 9, at 232–33 (explaining the linked carbon-market between California and Québec in the Western Climate Initiative); Erica Morehouse, *Western Climate Initiative Expands: Ontario to Join California-Québec Carbon Market*, ENV'T'L DEF. FUND (Sept. 22, 2017), <http://blogs.edf.org/climatetalks/2017/09/22/western-climate-initiative-expands-ontario-to-join-california-quebec-carbon-market/> [<https://perma.cc/48NY-24MP>]. *See, e.g.,* LINKAGE, CAL. AIR. RES. BD., <https://www.arb.ca.gov/cc/capandtrade/linkage/linkage.htm> [<https://perma.cc/KE6E-92T5>].

and Manitoba through the Western Climate Initiative (WCI).¹¹⁷ Although WCI represents a voluntary agreement among its members, it is coordinated with emissions trading programs of the participating jurisdictions, much like CARB’s coordinated efforts between the agency and local air districts and neighboring states.¹¹⁸ WCI Partner jurisdictions consult to provide recommendations for achieving emissions reductions and comprehensive trading systems in the most cost-effective, administratively feasible manner.¹¹⁹ Thus, California’s current cap-and-trade framework appears to be an optimal, synchronized approach to achieve AB 32’s goals. Because cap-and-trade is likely the most workable regulatory framework, this Article proposes a solution to provide a “check” of sorts on CARB’s implementation and enforcement authority under AB 32.

B. Cooperative Agency Alternatives

CARB is undoubtedly the lead agency on air quality issues and has been since 1967.¹²⁰ CARB is governed by an eleven-member board: six experts in fields like medicine, engineering, chemistry, business, and law and five elected officials from California’s regional air pollution control agencies.¹²¹ Because CARB is responsible for such far-reaching policy objectives in monitoring statewide air quality, the Agency reasonably involves some groups to assist it with specified air quality matters.

It is practicable for the Legislature or CARB to create a co-committee to assist the agency’s implementation of AB 32, largely because a similar body already exists. The Legislature created EJAC through AB 32 to ensure

117. CAP-AND-TRADE PROGRAM: BACKGROUND INFORMATION, CAL. AIR. RES. BD., <https://www.arb.ca.gov/cc/capandtrade/capandtrade.htm> [<https://perma.cc/4QUF-W73W>] (last reviewed Nov. 21, 2017).

118. *Id.*

119. PARTICIPATION IN THE WESTERN CLIMATE INITIATIVE, CAL. AIR. RES. BD., <https://www.arb.ca.gov/cc/capandtrade/wci/agreement.htm> [<https://perma.cc/32DE-QMEB>]. WCI Partners formed WCI, Inc., in 2007 as a non-profit corporation to provide administrative and coordination support for WCI Partners’ implementation of their respective cap-and-trade programs. *See generally Western Climate Initiative, Inc.*, WCI, INC., <http://www.wci-inc.org/index.php> [<https://perma.cc/2Z7P-T65A>].

120. *See supra* note 108 (citing cases referencing the propensity of California courts to deem CARB the expert on air quality matters); CAL. AIR RES. BD., *History of Air Resources Board* (2019), <https://www.arb.ca.gov/knowzone/history.htm> [<https://perma.cc/DRY5-Z2WT>]. California passed the Mulford-Carrel Act in 1967 to establish CARB by combining the Bureau of Air Sanitation and the Motor Vehicle Pollution Control Board.

121. *Id.*

that CARB considered impacts of GHG emissions on DACs and low-income communities.¹²² Although CARB must consider EJAC’s recommendations in developing AB 32’s Scoping Plan, CARB is not required to incorporate EJAC’s recommendations in its final plans to implement AB 32.¹²³ Furthermore, EJAC’s responsibilities lie within the realm of environmental justice and focus primarily on ameliorating disproportionate impacts of GHG emissions on DACs.¹²⁴ Notwithstanding the benefits that EJAC’s recommendations provide, EJAC merely serves a supportive role with non-compulsory influence on CARB’s implementation of AB 32. In other words, EJAC has no teeth.

Still, EJAC is proof that CARB abides by statutory directives to consult relevant agencies. This Article proposes that the Legislature create a new, independent scientific advisory committee—or an enabling statute directing CARB to create the committee—to partner with CARB to implement and enforce AB 32 through 2020, and SB 32 through 2030. The independent scientific advisory committee, or Scientific Compliance and Enforcement Board (SCEB), would perform scientific analyses to verify GHG emissions reductions from regulated sources and provide more scrutinized approaches to ensure reductions from offsets are *real*. SCEB would be funded through allowance auction revenues, and it would be dedicated specifically to monitoring and verifying recorded emissions reductions. SCEB may also verify that CARB awards offset credits for activities truly “additional” to regulated entities’ emission reduction activities.¹²⁵ Delegating the aforementioned responsibilities to SCEB allows CARB to focus on policy, as experts in policy, and properly charges scientists with providing data to confirm with scientific evidence that reductions are real.

SCEB would be a ten- to fifteen-member board comprised of leading scientists from California’s universities and research centers. Specifically, CARB may source board members from institutions with qualifying research facilities and technology to provide one or two scientists and researchers

122. See *supra* note 18.

123. SCOPING PLAN UPDATE, *supra* note 3. See also ENVTL. JUSTICE ADVISORY COMM., AB 32 ENVIRONMENTAL JUSTICE ADVISORY COMMITTEE (EJAC) RECOMMENDATIONS FOR PROPOSED 2030 TARGET SCOPING PLAN UPDATE (Dec. 22, 2016), https://www.arb.ca.gov/cc/ejac/ejac_recommendations_proposed_plan122216.pdf [<https://perma.cc/VHW3-EKCM>] (providing all 2016 recommendations by EJAC to CARB for continued implementation of AB 32).

124. DACs are often located in “hotspots” with highly concentrated pollution levels.

125. This is a key impediment to CARB’s current cap-and-trade scheme and may only exacerbate if verification safeguards are not soon implemented. See *e.g.*, *Citizens Against Refinery’s Effects, Inc. v. EPA*, 643 F.2d 178 (4th Cir. 1981) (affirming EPA approval of a permit to construct an oil refinery wherein EPA awarded ozone offset credits for conduct that would have happened anyway).

to join SCEB.¹²⁶ It is most beneficial to include individuals from universities around the state to arm SCEB with collective, regional analyses of statewide air quality and GHG emissions. This idea embraces a pragmatic method to achieve accurate emissions measurements by providing comprehensive regional calculations of GHG emissions.

Although CARB would likely select SCEB members, California has many notable research facilities for CARB to consider. For example, two SCEB members might be professional researchers from the Air Quality Research Center at the University of California, Davis (UC Davis), where researchers have experience with performing scientific analyses on emissions, air quality issues, and public health near the San Fernando and San Joaquin Valleys.¹²⁷ Additionally, two SCEB members could be professional researchers from the Center for Clean Air at the University of California, Los Angeles (UCLA), where scientists and researchers produce studies on air quality, health, and sustainability in the Los Angeles area.¹²⁸ Remaining SCEB researchers and scientists might hail from universities or facilities in remaining regions of the state.¹²⁹

Finally, SCEB would have the “teeth” EJAC lacks to compel CARB to act, based on SCEB’s recommendations and findings. Legislation that creates SCEB should provide SCEB with authority to impose sanctions on regulated sources for noncompliance. Sanctions may increase as sources repeatedly fail to attain reductions as specified in CARB’s cap. Such authority may provide SCEB with teeth to ensure CARB and regulated sources acknowledge and cooperate with empirical emissions data findings. Accordingly, CARB may then enforce compliance with GHG emissions caps, rather than relying on estimates and standards-based offset measurements for reductions.

126. The Legislature may permit CARB to define “qualifying research facilities and technology,” or it may specify the facilities equipped with technology to make the necessary climate assessments.

127. See *AQRC Researchers Measure Historic Methane Gas Leak in Southern California Near Porter Ranch – An Affluent subdivision of the San Fernando Valley Northwest of Downtown Los Angeles*, U.C. DAVIS AIR QUALITY RES. CTR. (Feb. 25, 2016), <https://aqrc.ucdavis.edu/outreach/news/#id966> [<https://perma.cc/3T65-Z5GH>].

128. See generally *Center for Clean Air: Our Work*, The Regents of the University of California, UCLA, <https://www.ioes.ucla.edu/cleanair/our-work/> [<https://perma.cc/KFG3-Y9BF>].

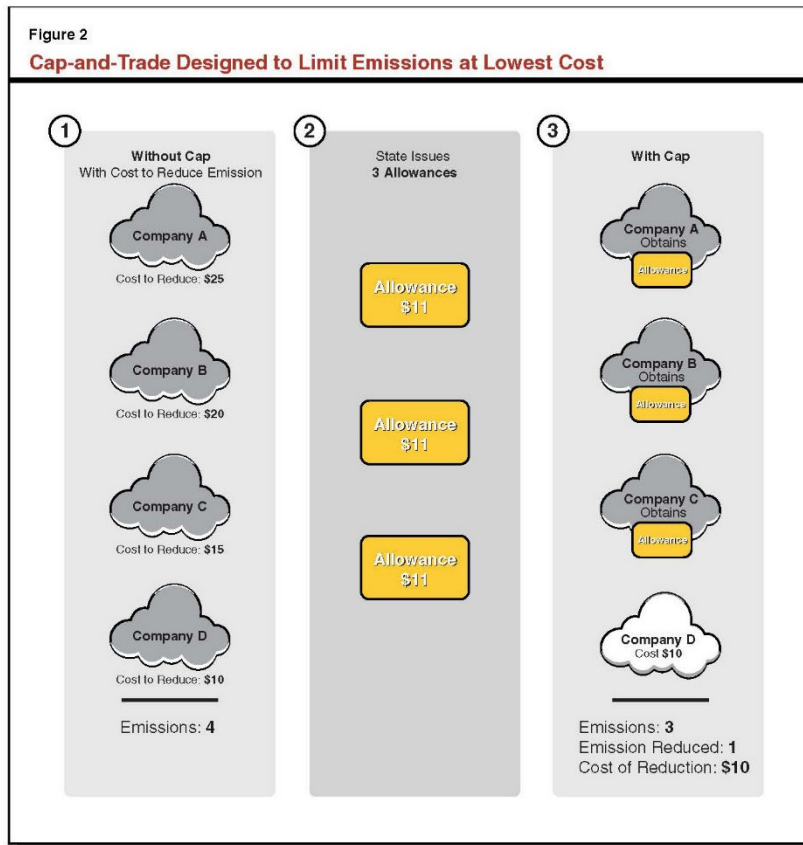
129. See e.g., UNIV. OF CAL. SANTA BARBARA, SANTA BARBARA CTY. AIR POLLUTION CONTROL DIST., <https://www.ourair.org/ucsb/> [<https://perma.cc/9N6M-M3GR>].

VI. CONCLUSION

It is necessary to ensure California's climate change policies attain their intended goals because these policies often serve as model strategies for the rest of the world. Thus, to ensure that California reduces statewide GHG emissions by 50 percent in 2030, the science of the reductions must be accurate and verifiable. SCEB can assist CARB with enforcing statutory emissions caps and ensuring that regulated sources are indeed abiding by statutory caps to reduce their GHG emissions.

APPENDIX A

*EXHIBIT A: CAP-AND-TRADE REGULATION DESIGNED TO ENCOURAGE COST-EFFECTIVE REDUCTIONS TABLE*¹³⁰



130. THE 2017-18 BUDGET: CAP-AND-TRADE EXPENDITURE PLAN, LEGISLATIVE ANALYST'S OFFICE at 8 (Feb. 2017), <https://lao.ca.gov/reports/2017/3553/cap-and-trade-021317.pdf> [<https://perma.cc/88C3-5NM7>].

