



November 13, 2015

Chair Mary Nichols and Board Members  
California Air Resources Board  
1001 "I" Street  
Sacramento, CA 95814

RE: Second Draft Cap-and-Trade Auction Proceeds Second Investment Plan: Fiscal Years 2016-17 through 2018-19

Dear Ms. Nichols and Board members:

On behalf of the under-signed organizations and individuals, Green Schools Initiative welcomes the opportunity to submit comments on the *Second Draft Cap-and Trade Auction Proceeds Second Investment Plan: Fiscal Years 2016-17 through 2018-19*. **Collectively, our organizations represent more than 1.6 million parents, students, facility directors, school board members, school district administrators, environmental educators, and health and environmental organizations, and nearly all 1,000 school districts and county offices of education in California.** We advocate for K-12 public schools in California and are dedicated to ensuring that schools are community models of sustainability that contribute to achieving greenhouse gas reduction goals and that provide healthy, safe learning environments for *all* California students. Climate change is a children's issue: children are more vulnerable to heat-related illnesses, air pollution and asthma, and lack of access to safe outdoor spaces to play and learn. The California State PTA and the American Academy of Pediatrics both issued resolutions and policy statements this year recognizing children's special vulnerabilities to climate change and called for action.<sup>1</sup>

Given that children are required to attend school, and that 1 in 5 Californians spend their day in a K-12 school – including 6.2 million school-aged children – **we urge the California Air Resources Board to prioritize investments in greenhouse gas reduction projects at K-12 schools in its *Investment Plan* to protect children and capture significant emission reductions.** Our recommendation is aligned with the "California Blueprint for Environmental Literacy," recently published by the California State Superintendent's Environmental Literacy Task Force and the Californians Dedicated to Education Foundation, which recommends that the California Air Resources Board explore possibilities for allocating a portion of the Greenhouse Gas Reduction Fund for developing green schools and schoolyards.<sup>2</sup>

Healthy, sustainable, and green schools will contribute to each of the three over-arching priorities established in the draft *Investment Plan* for Transportation & Sustainable Communities, Clean Energy & Energy Efficiency,

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<sup>1</sup> "Climate Change is a Children's Issue," Adopted by California State PTA Convention Delegates, May 2015. [downloads.capta.org/res/ClimateChange\\_is\\_a\\_ChildrensIssue.pdf](http://downloads.capta.org/res/ClimateChange_is_a_ChildrensIssue.pdf). "Global Climate Change and Children's Health," American Academy of Pediatrics, October 2015. [pediatrics.aappublications.org/content/early/2015/10/21/peds.2015-3232](http://pediatrics.aappublications.org/content/early/2015/10/21/peds.2015-3232)

<sup>2</sup> "A Blueprint for Environmental Literacy," A report by State Superintendent of Public Instruction Tom Torlakson's Environmental Literacy Task Force, 2015. <http://www.cde.ca.gov/pd/ca/sc/envronliteracyblueprint.asp>

and Natural Resources & Waste Diversion. Alternatively, California will *not* achieve the goals of reducing greenhouse gas emissions by 40% below 1990 levels by 2030 if K-12 schools are not included given their sizable footprints. We submitted similar comments on the first draft of the *Investment Plan* on September 1, 2015, but the second draft does not reflect these comments and we remain concerned about this significant gap in capturing substantial co-benefits from school-based projects for urban forestry, water conservation, active transportation, and waste reduction, among others. This letter builds on our earlier comments and provides additional recommendations for why and how to integrate schools into ARB's priority investments.

The word "schools" appears only once on page 32 of the second draft *Investment Plan* (in the first draft it was page 11 – same sentence) in a passing reference to active transportation. There is one existing program under ARB's Hybrid and Zero Emission Truck and Bus Voucher Incentive Project (HVIP) that includes grants for rural school districts to invest in lower-emission school buses, and should be continued. Proposition 39 provides funding for energy conservation and renewables at K-12 schools and is having a positive measurable impact on reducing schools' energy use. However, Prop 39 does not cover other greenhouse gas reduction projects like transit, composting, tree planting, asphalt removal, or water conservation. Currently, K-12 school districts are either excluded completely and are not eligible to apply for grants or the barriers to pursue greenhouse gas reduction funds are too high, requiring separate complex applications and reporting to different agencies, and managing separate partnerships in order to be eligible.

We urge ARB to include "Sustainable Schools" as an investment element relevant to investment concepts and "cross-cutting approaches" (pp. 28-29) in its *Second Draft Three Year Investment Plan 2016-2019* and to ensure that K-12 public school districts – especially those in disadvantaged communities designated by CalEPA – are eligible to receive GGRF funds via existing or new grant programs. Sustainable, healthy schools are critical to achieving the State's greenhouse gas reduction goals and to protecting the health and well-being of vulnerable children from the impacts of climate change at school, while engaging students by modeling sustainability at school.

We recommend:

**1. Investments in Integrated Projects in Disadvantaged Communities for Local Climate Action (pp. 28-29) –**

We support priority investments for disadvantaged communities, as required by SB535, and recommend that K-12 schools in disadvantaged communities be included in your framework for "community greening" projects. There are an estimated 125,000 acres of school grounds<sup>3</sup> (admittedly conservative estimate) and 36,000 school buildings that are perfect candidates for integrated approaches, including green infrastructure, tree planting, asphalt removal, cool/green roofs, active transportation, clean school buses, water conservation, water/energy nexus and more. School districts and Local Educational Agencies (LEAs) should be included in the "menu of potential projects" (p. 29) and should be included as potential recipients of grants, technical assistance, and other forms of support. To date, schools and LEAs "have been virtually left out of California's state policy framework on sustainable communities planning," including both SB375 and the Strategic Growth Council as well as AB32 – a glaring state disconnect considering that school facilities funding has been about 2/3 of all state general obligation bonds since the 1970s.<sup>4</sup>

**2. Include Schools as an Urgent Priority for Urban Forestry Grants (p. 43 and Figure 16):** A recent study by UCLA estimated the average number of days with temperatures hotter than 95° F will increase from 58/year in 1980-2000 to 98/year in 2041-2060 in Riverside (~70% increase and even more when projected to 2100), 6/yr

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<sup>3</sup> Jeff Vincent, California's K-12 Educational Infrastructure Investments: Leveraging the State's Role for Quality School Facilities in Sustainable Communities, University of California-Berkeley Center for Cities and Schools, 2012. <http://citiesandschools.berkeley.edu/reports/CCS2012CAK12facilities.pdf>

<sup>4</sup> Vincent, Ibid, p. 18.

to 22/yr to 54/yr in Los Angeles, and 111/yr to 134/yr to 154/yr in Bakersfield, among other parts of southern California.<sup>5</sup> Paved school grounds can be 20-40 degrees hotter than vegetated areas, worsening heat exposure. Investments at schools for urban forestry, asphalt removal and more permeable surfaces, cool roofs, and other green infrastructure projects can help reduce and mitigate these heat island effects, capture stormwater, sequester carbon in the soil, and save money, as well as create living schoolyards and outdoor classrooms that enhance children's learning. However, a study by Claremont Graduate University and Council for Watershed Health showed that **20% of the 509 elementary schools surveyed in Los Angeles Unified School District had 0% tree canopy and 100% paving** – and that the schools with the fewest trees and most paving were primarily in low-income schools and communities.<sup>6</sup> We know that children's health and ability to learn are worsened by heat extremes. Yet, K-12 schools are not eligible for CalFire urban forestry grants; in some regions (but not all) non-profits may apply with schools as a partner but schools, districts, and LEAs cannot apply directly. Given the greater impact of heat on children and the disparity in tree cover at schools in disadvantaged communities, **ARB should ensure that K-12 schools in disadvantaged communities are eligible to apply directly for urban forestry grants, together with other integrated "school greening" projects with multiple co-benefits. In Figure 16 (p. 45), school districts and LEAs should be included as potential recipients.**

**3. Include Schools in Reducing Short-lived Climate Pollutants (p. 44 and Figure 16)** – We support the Investment Plan's priority to reduce short-lived climate pollutants, such as methane, via waste reduction and composting; however, we urge you to ensure that K-12 schools are eligible for funding via CalRecycle. The state will not be able to meet its 75% diversion goal by 2020 if K-12 schools are not participating, given that school districts are often the largest single generator of waste in many communities – upwards of 5% of municipal waste – and generate more than 764,000 tons per year.<sup>7</sup> AB1826 requires commercial-scale composting, including schools. In April 2016, the law requires that schools that generate more than 8 cubic yards of organic waste per week must arrange for composting (and regulations tighten the targets in subsequent years to achieve 75% diversion by 2020). Yet, current and proposed grant programs for waste reduction and composting of organics through CalRecycle exclude K-12 schools. Investing in recycling and composting at K-12 schools is leveraged because children bring these habits home and teach and motivate their parents and community members to do so, as well. Schools cannot comply with AB1826 and AB32 diversion requirements if they cannot access funding; and community diversion requirements cannot be met unless school districts participate. **The "Waste as a Resource" section on p. 44 should include source reduction strategies, in addition to the resource recovery infrastructure strategies and not only anaerobic digestion projects. Figure 16 "Reduce Methane Release from Organic Waste" should include a bullet point under "Organic Waste" to "Support infrastructure needed for source reduction and organics recycling/composting" and should also include school districts and LEAs in the list of "Potential Recipients."**

**4. Include Schools in Low-Carbon Water System and Water Conservation (p. 34-36 and Figure 14)** – Schools have a lot of acreage and grass and can be large water-users. If schools and LEAs are not participating in water conservation efforts, it will be difficult to achieve the target to lower urban water usage 20% below 2005 levels by 2020 (Figure 13, p. 35). Improving water conservation and increasing permeable surfaces on school grounds can contribute to recharging groundwater, reducing stormwater runoff, and saving water and energy through decreased water demand. The State Water Board's Drought Response Outreach Program for Schools (DROPS) was highly successful and over-subscribed.<sup>8</sup> The DROPS program should be renewed, perhaps via GGRF allocations; it was previously funded via Propositions 13, 40, and 50; there are not plans currently to renew the

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<sup>5</sup> "Climate Change in Los Angeles Region Project," Dr. Alex Hall, UCLA Dept of Atmospheric and Oceanic Sciences, UCLA. [http://research.atmos.ucla.edu/csrl/LA\\_project\\_summary.html](http://research.atmos.ucla.edu/csrl/LA_project_summary.html)

<sup>6</sup> Moreno, A.; Tangenberg, J.; Hilton, B.N.; Hilton, J.K. An Environmental Assessment of School Shade Tree Canopy and Implications for Sun Safety Policies: The Los Angeles Unified School District. *ISPRS Int. J. Geo-Inf.* 2015, 4, 607-625.

<sup>7</sup> <http://www.calrecycle.ca.gov/ReduceWaste/Schools/>

<sup>8</sup> [http://www.waterboards.ca.gov/water\\_issues/programs/grants\\_loans/drops/](http://www.waterboards.ca.gov/water_issues/programs/grants_loans/drops/)

DROPS program. **Figure 14 (p. 39) should include under “Low Carbon Water System” a bullet point: “Support urban water conservation and increased stormwater capture” and include school districts and LEAs in the list of “Potential Recipients.”**

**5. Include Schools in Transportation and Sustainable Communities (pp. 32-34 and Figure 12) –** From Safe Routes to School: “Within the span of one generation, the percentage of children walking or bicycling to school has dropped precipitously, from approximately 50% in 1969 to just 13% in 2009. In 2009, American families drove 30 billion miles and made 6.5 billion vehicle trips to take their children to and from schools, representing 10-14 percent of traffic on the road during the morning commute. **Returning to 1969 levels of walking and bicycling to school would save 3.2 billion vehicle miles, 1.5 million tons of carbon dioxide and 89,000 tons of other pollutants—equal to keeping more than 250,000 cars off the road for a year.**”<sup>9</sup> Given the heavy traffic moving children to school each day, we recommend that **greater priority be made for clean school buses under “Advanced Vehicle Technology” in Figure 12 (p. 33) and that school districts and LEAs be included as “Potential Recipients.”** Also, we recommend that **“sustainable school strategies” and “transit-oriented schools” be included under “Sustainable Communities and Transportation Infrastructure” in Figure 12 and that school districts and LEAs be included as “Potential Recipients.”**

**6. Include Schools in Sustainable Communities, “Neighborhood Scale,” Community Centers, and other frameworks for integrated approaches to implementing climate action plans –** Many public comments on the *Investment Plan* have recommended including strategies and mechanisms to reduce the barriers for integrated and comprehensive projects. This is particularly relevant for K-12 schools, where integrated projects with maximum benefits could include active transportation, cool roofs, water/energy nexus, green infrastructure, waste reduction, tree planting, and asphalt removal/permeable surfaces. However, needing to apply to multiple agencies for separate grants creates silos and tremendous barriers that limit these projects. Furthermore, K-12 school districts and LEAs are not considered eligible to apply to many of the existing grant programs funded via AB32. **We recommend that ARB develop coordinated mechanisms to streamline applications for integrated projects and include K-12 school districts as eligible applicants.** This could include establishment of a “Healthy & Sustainable Schools” integrated grant program for school-based climate action projects that would align with the California Department of Education’s existing Green Ribbon Schools award and recognition program (<http://www.cde.ca.gov/ls/fa/sf/greenribbonprog.asp>). This recognition program application includes metrics for energy and water use, waste generation and diversion, carbon footprint, outdoor landscaping and other relevant items. **California Green Ribbon School awardees are exemplary models of integrated sustainability programs and are diverting upwards of 50% of their waste, reducing their carbon footprints 10-30%, promoting transit and Safe Routes to Schools, creating green schoolyards and green infrastructure, saving water and energy, and engaging students in hands-on sustainability education and behaviors that ripple throughout the community.** Our September 1, 2015 letter provided specific examples of the tangible and multiple benefits that sustainable, green schools are generating, such as the 2015 Green Ribbon awardees, several of which are schools serving disadvantaged communities. California has 1,000 school districts and 10,300 public schools with huge potential to save millions of tons of greenhouse gases per year.

Other options for streamlining the application process for integrated projects could include establishing an inter-agency coordination mechanism and ensuring that K-12 school districts are eligible. We also support efficient and innovative financing mechanisms, including revolving loan funds and state green development banks, to extend the utility of GGRF proceeds, as outlined in the *Investment Plan* (p. 29).

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<sup>9</sup> Safe Routes to School National Partnership, Quick Facts and Stats, <http://saferoutespartnership.org/healthy-communities/101/facts>

The 25 organizations and individuals signing this letter, representing nearly all 1,000 school districts in California, support reducing the carbon footprint and improving the sustainability of K-12 school buildings, grounds, and operations; promoting healthy, resilient communities; and teaching environmental and outdoor education and climate literacy. We believe that sustainable schools and environmental literacy are fundamental to California's health, prosperity, and security. Investing in greenhouse gas reduction projects at schools will help solve the growing climate problems we face now, while also preparing our children to be the environmental leaders and engaged community members of tomorrow. Thank you for your consideration of our comments to include schools as part of California's solution for mitigating climate change.

Sincerely,



Deborah Moore, Executive Director  
Green Schools Initiative  
Berkeley, CA  
deborah@greenschools.net

On behalf of:

Nancy Chaires Espinoza, Legislative Representative  
California School Boards Association  
Sacramento, CA  
nchaires@csba.org

Shayne Silva  
California State PTA  
Sacramento, CA  
legislation@capta.org

Ian Padilla, Legislative Advocate  
Coalition for Adequate School Housing (C.A.S.H.)  
Sacramento, CA  
ipadilla@m-h-w.com

Bill Orr, Executive Director  
Collaborative for High Performance Schools (CHPS)  
Sacramento, CA  
borr@chps.net

Craig Cheslog, Co-Director, VP, California Policy  
Common Sense Kids Action  
San Francisco, CA  
ccheslog@commonsense.org

Anna Ferrera, Executive Director  
School Energy Coalition  
Sacramento, CA  
aferrera@m-h-w.com

Christos Chrysiliou, Director of Architectural &  
Engineering Services, Facilities Services Division  
Los Angeles Unified School District  
Los Angeles, CA  
christos.chrysiliou@lausd.net

Nik Kaestner, Sustainability Director  
San Francisco Unified School District – A California  
Green Ribbon School District-Silver  
San Francisco, CA  
KaestnerN@sfusd.edu

Anthony W. Knight, Superintendent  
Oak Park Unified School District – A National Green  
Ribbon School District  
Oak Park, CA  
TKnight@oakparkusd.org

Jeff Vincent, Deputy Director  
Center for Cities and Schools  
University of California-Berkeley  
Berkeley, CA  
jvincent@berkeley.edu

Pauline Souza, Partner, Sustainability Director  
WRNS Studio, Architect  
National Green Schools Committee Chair –  
USGBC/Center for Green Schools  
San Francisco, CA  
psouza@wrnsstudio.com

Paul Chapman, Executive Director  
Inverness Associates  
Berkeley, CA  
pchapman5@gmail.com

Arden Bucklin-Sporer, Executive Director  
Education Outside  
San Francisco, CA  
arden@educationoutside.org

Anne Kelsey Lamb, Director  
Regional Asthma Management & Prevention  
(RAMP)  
Oakland, CA  
anne@rampasthma.org

Zenobia Barlow, Co-Founder & Executive Director  
Center for Ecoliteracy  
Berkeley, CA  
zenobia@ecoliteracy.org

Mary Kimball, Executive Director  
Center for Land-Based Learning  
Winters, CA  
mary@landbasedlearning.org

Adrian Almquist, Garden Programs Manager  
Community Grows  
San Francisco, CA  
Adrian@communitygrows.org

Casey Poldino, Zero Waste Specialist  
County of Marin  
San Rafael, CA  
CPoldino@marincounty.org

Candice Dickens-Russell, Director  
Environmental Education  
TreePeople  
Beverly Hills, CA  
crussell@treepeople.org

Sharon Danks, CEO  
Green Schoolyards America  
Berkeley, CA  
sharon@greenschoolyardsamerica.org

Will Parish, Founder & President  
Ten Strands  
San Francisco, CA  
wparish@tenstrands.org

Leslie Tamminen, Director  
Seventh Generation Advisors  
Los Angeles, CA  
leslie.tamminen@gmail.com

Susan Silber, Program Director  
Nature's Voices Project  
Berkeley, CA  
naturesvoices@gmail.com

Christiane Parry, Public Education Manager  
California Coastal Commission\*  
San Francisco, CA  
Chris.Parry@coastal.ca.gov

\* Affiliation for identification purposes only