

*Testimony to the*  
**CGA Environment Committee**  
*by*  
**Louis Rosado Burch, CT Education Association**  
**Re: S.B. 961 - AAC Carbon-Free Schools**  
February 15, 2023

Good morning, Senator Lopes, Representative Gresko, distinguished Vice Chairs, Ranking Members, and honorable rank and file members of the Environment Committee. My name is Lou Rosado Burch, Legislative Coordinator for the Connecticut Education Association (CEA), representing educators in over 150 school districts in Connecticut.

CEA is pleased to offer testimony in support of S.B. 961: AAC Carbon-Free School Requirements for New School Construction, and we applaud the committee for raising this important concept.

Science tells us that climate change is a reality that is already affecting our communities, and will only continue to impact our environment, our economy, and our health as we move into the future. We also know that extreme temperatures and air quality impacts associated with this process can adversely impact the health and academic achievement of our students, particularly in our most underserved districts.

S.B. 961 acknowledges the impacts of climate change on our school environments, and it seeks to put programs in place to accelerate health-protective infrastructure and resiliency improvements in our schools. These include requirements for net-zero construction of new schools and establishing health and safety guidelines for the renovation of school facilities. The bill also creates a requirement for any application for school construction grants to demonstrate how new school buildings will achieve “net-zero” carbon emissions.

CEA and our member affiliates strongly support efforts to advance energy efficiency in our schools, reduce carbon emissions, and safeguard the health of students and school faculty alike. CEA has led the fight to improve indoor air quality in our schools, recognizing that bad air quality can have a detrimental effect on the long-term health and safety of students, teachers, and other school employees. One of the consequences of poor air quality is “sick-building syndrome,” which can lead to severe and chronic building related illness if certain indoor environmental conditions are left unaddressed over time.

This bill is complementary to ongoing efforts to improve air quality in our school buildings by prioritizing low carbon, high efficiency facility improvements and providing critical funding and support to get the work done. S.B. 961 establishes optimal indoor temperature ranges for school facilities, which are critical to ensure safe indoor environments that are protective of

students and teachers' health. These guidelines will help us obtain a clearer picture of the need for school HVAC upgrades across the state, while providing a mechanism to ensure districts take corrective actions where necessary.

This is especially critical as empirical research clearly shows that extreme classroom temperatures negatively affect student achievement. A study of PSAT scores of 10 million students found that, without air conditioning, each one degree Fahrenheit increase in temperature over the school year reduced the amount that students learn by one percent <sup>1</sup>.

Further, a 2016 study examining high-stakes test scores among 75,000 New York City high school students found that, for every increase of 1 °F, test scores fell by 0.2% for the average student, and that the likelihood of failing an exam taken on a 90 °F day versus a 75 °F day would be 12.3% higher.<sup>2</sup>

Remarkably, there are currently no laws or public health codes in Connecticut regarding excessive heat in school buildings. It's worth noting that The Connecticut Department of Agriculture created regulation Conn. Regs [§ 22-336-19](#) which limits the maximum air temperature in dog kennels to 90 °F. Connecticut General Statutes [§ 19a-109](#) requires businesses to maintain indoor-air temperatures no colder than 65 °F. The Connecticut Department of Public Health has interpreted this statute to apply to school buildings, though clarification is warranted.

Improving and maintaining HVAC systems, including providing adequate heating and air conditioning, can reduce the need for emergency school closures, especially during extreme heat waves. Routine HVAC maintenance and proper ventilation are also critical to reduce the risk of health and achievement impacts related to extreme temperatures and other indoor health hazards.

Moreover, energy efficiency measures can save municipalities millions of dollars over time. School districts stand to save by pursuing net-zero school construction projects, as well as by leveraging renovation projects to reduce building emissions and enhance climate resilience. According to the Climate Jobs National Resource Center, school districts that fail to pursue net-zero construction could spend up to 20-25% more over a 30-year period based on increased energy and maintenance costs alone<sup>3</sup>.

It's not a question of whether climate change is going to impact our schools and their ability to provide safe, healthy learning spaces for our children, it's a question of how severe those impacts will be. Our classrooms should be incubators for innovation and independent thought, not for COVID-19, mold, and heat-related impacts to achievement. State and local governments

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<sup>1</sup> Goodman, J. (2018, May 28). Harvard Kennedy School. "When the heat is on, student learning suffers." Available online: <https://www.hks.harvard.edu/announcements/when-heat-student-learning-suffers>

<sup>2</sup> Eitland, E., Klingensmith, L., MacNaughton, P., & Laurent, J. C. (n.d.). *Schools for Health*. Boston: Harvard T.H. Chan School of Public Health. Available online:

[https://schools.forhealth.org/?utm\\_content&utm\\_medium=email&utm\\_name&utm\\_source=govdelivery&utm\\_term](https://schools.forhealth.org/?utm_content&utm_medium=email&utm_name&utm_source=govdelivery&utm_term)

<sup>3</sup> <https://www.cjnc.org/wp-content/uploads/2022/02/The-Financial-Case-for-Net-Zero-Energy-Schools-FINAL.pdf>

must take proactive measures to address the impacts of climate change in our schools, not leave municipalities scrambling to respond to crises as they arise.

Thank you for the opportunity to submit testimony on this vital issue, and we look forward to working with the committee on this important process moving forward.