November 24, 2021

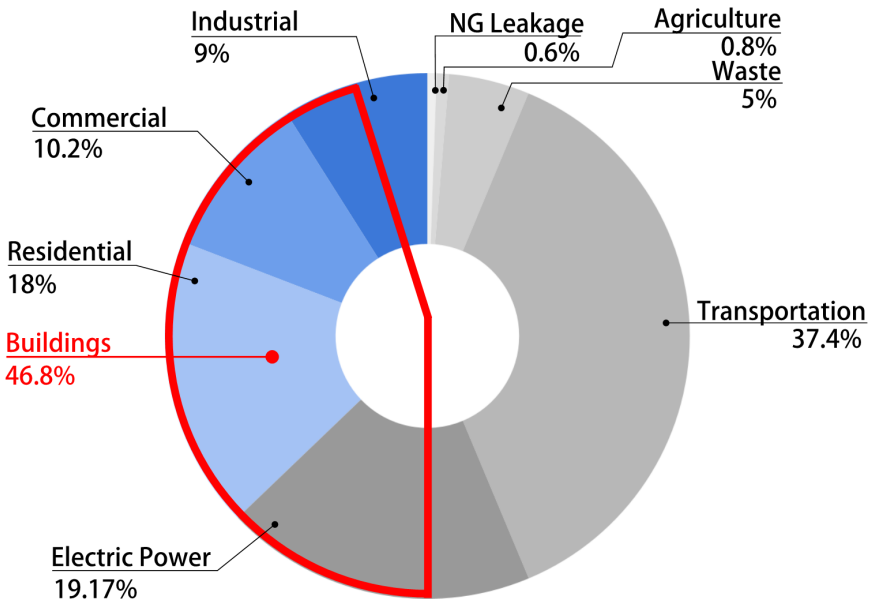
Commissioner Katie Dykes
Connecticut Department of Energy & Environmental Protection
79 Elm Street
Hartford, CT 06106

Re: Electricity sector greenhouse gas emissions written comments

Dear Commissioner Dykes,

Thank you for the opportunity to comment on the proposed change in greenhouse gas accounting. I think there are benefits and disadvantages to this method of accounting as outlined below:

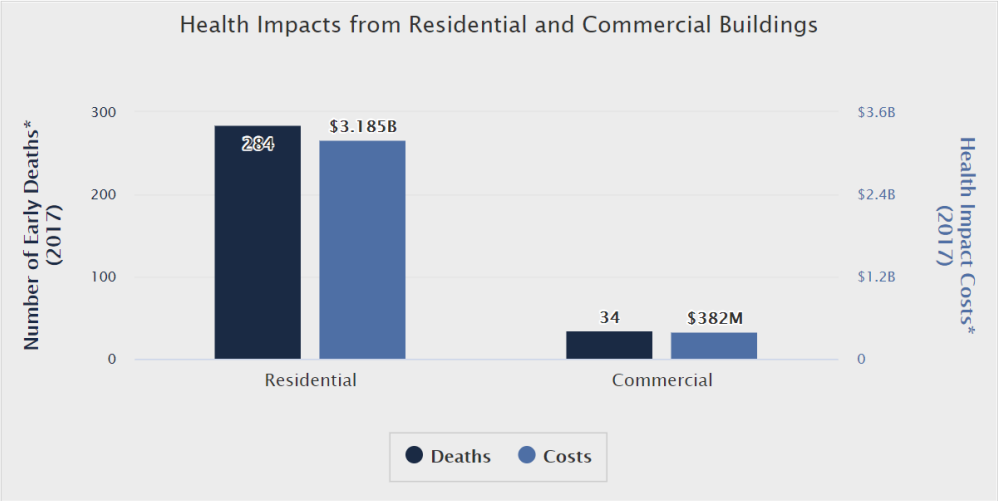
1. **Benefit - Evaluating Sector Emissions**: Using consumption as a baseline makes it easier to allocate electrical sector emissions to their end uses to more accurately understand their associated potential energy efficiency benefits, especially as those sectors electrify. For example if you incorporate the average electrical sector percentage used in buildings, that sector ends up accounting for 46.8% of Connecticut's greenhouse gas emissions.



Estimated greenhouse gas emissions in Connecticut from buildings
Graphic by the Connecticut Green Building Council
Sources: 2018 Connecticut Greenhouse Gas Inventory, DEEP Office of Climate Change, Technology and Research, 2019, Energy Consumption by Sector, Energy Information Administration

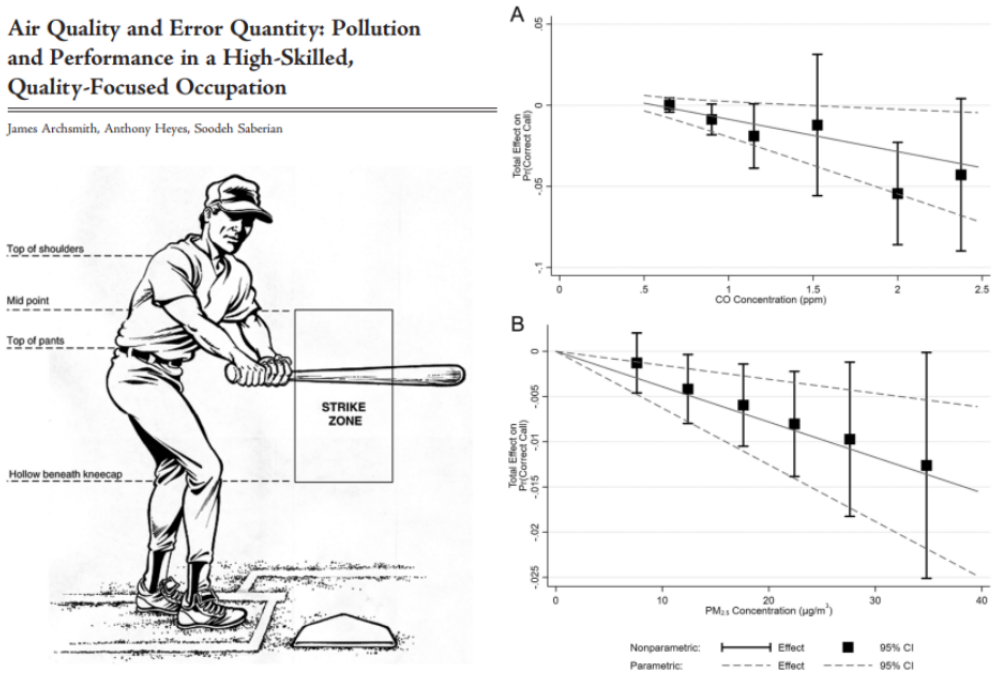
2. **Disadvantage - No Associated Reduction of Local Dirty Power**: The co-benefits of reducing our consumption get lost if we aren't making reductions in the fossil fuel power generated in-state. If the State is serious about committing to its climate goals, the residents should be able to benefit from investments in the reduction in greenhouse gas emissions through associated reductions in air pollution. The positive impact of the reductions in greenhouse gas emissions are averaged over the whole globe, but the reduction in air pollution is directly experienced by CT residents,

and has the opportunity to pay itself back in reduced health care costs and higher rates of economic productivity.



Health Impacts of Building Emissions in Connecticut

In Connecticut, air pollution from burning fuels in buildings led to an estimated 318 early deaths and $3.567 billion in health impact costs in 2017. RMI, [What is the health impact of buildings in your state?]



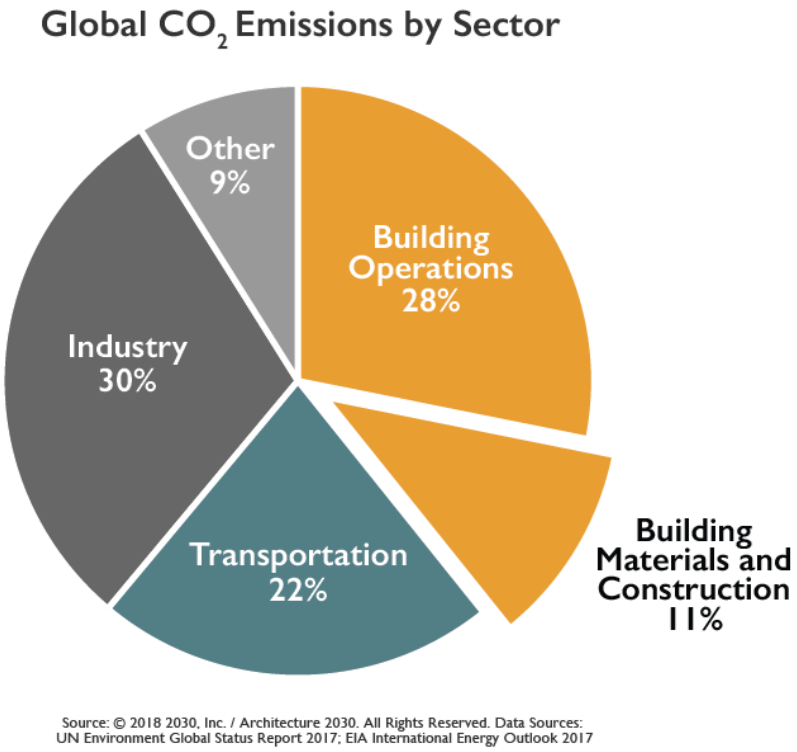
Cognitive/ Productivity Impacts of Air Pollution

[Air Quality and Error Quantity: Pollution and Performance in a High-Skilled, Quality-Focused Occupation]

James Archsmith, Anthony Heyes, and Soodeh Saberian, Journal of the Association of Environmental and Resource Economists 2018 5:4, 827-863

3. **Opportunity - Embodied Carbon**: If the state is proposing to use consumption in the electrical sector, then it should use consumption across the board. Otherwise, I would consider this accounting method gaming the system to meet our climate goals through creative accounting

rather than real greenhouse gas reductions. Currently a very large chunk of the state's consumption emissions are not counted because they are related to products and materials manufactured and shipped from out-of-state. For example, we know that a large portion of emissions associated with buildings is related to materials and construction, but that isn't tracked in our current inventory. Concrete alone is responsible for 7% of global GHG emissions. There are no cement plants located in CT, but we use the same amount of concrete as our neighboring states. So we should be tracking those emissions to be incentivized to make carbon reductions in our use of concrete to meet our state climate targets.



Our Greenhouse Gas Inventory Does Not Include Building Materials and Construction
Source: Architecture 2030

Thank you for your consideration, and I am happy to discuss how the greenhouse gas accounting methodology can better reflect and incentive improvements in the building sector.

Sincerely,

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