



the campaign for
environmentally responsible
health care

BOSTON OFFICE

Without Harm

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To: EEAC
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Health Care Without Harm applauds the continuing effort of our utility partners and the Council to advance C&I innovation, and tailored segment strategies. Along this topic, we felt it was worthwhile to inform the Council and interested stakeholders of an opportunity for significant savings, if with a somewhat long-term implementation horizon. Perhaps the operable words are, "You heard it here first."

In health care, innovation in controls and air quality monitoring have made possible dramatic cuts in the sector's high HVAC energy use. Adopting modern, outcomes-based, ventilation practices and air quality standards could create an opportunity for 20%-30% electricity and 30%-50% natural gas savings in the sector. For hospitals with digital controls, much of that savings could be captured by reprogramming and re-balancing existing HVAC and control assets in the vast majority of "unprotected" space, -spaces in which HVAC-carried infection is not a threat.

However, the potential savings are blocked by perhaps outdated, national code-required ventilation rates based on air changes per hour, rather than occupancy/IAQ. The Commonwealth's Energy, Building and Health Departments, and our utility partners can again be national leaders by collaborating with Health Care Without Harm and a few hospital pilot sites to allow and undertake controlled measurements of the savings, benefits and impacts of reduced ventilation rates.

These pilot tests would be conducted only in carefully limited, non-risk space. Data from these pilot sites and from hospitals in other regions can help form the basis of new standards or alternative compliance paths that could eventually be established by the code and standards issuing organizations. The Commonwealth could then adopt or reference those alternative paths in its own regulations, and utilities could then support their adoption by healthcare facilities, unleashing those significant, enduring savings.

It bears mentioning the opportunity is not limited solely to hospitals; labs comprise another, similar opportunity. Standards 'reform' combined with innovations in technology and controls could also dramatically improve energy performance while maintaining safety in the Commonwealth's large volume of healthcare, biotech, and higher education laboratories.

As the national hospital pilot effort matures in the next six months or so, we will reach out to the relevant state departments and our utility partners' healthcare account reps for their advice and potential support.

Thank you for your ongoing consideration and collaboration.

Respectfully,

Paul Lipke
Senior Advisor, Energy & Buildings