



U.S. General Services Administration

Coming Attractions from GSA's Green Building Advisory Committee

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About GSA's Green Building Advisory Committee

- A board of federal & non-federal advisors to GSA's Office of Federal High Performance Green Buildings
- Develops findings & recommendations to GSA & other agencies to make the federal building portfolio sustainable
- Role is strictly advisory

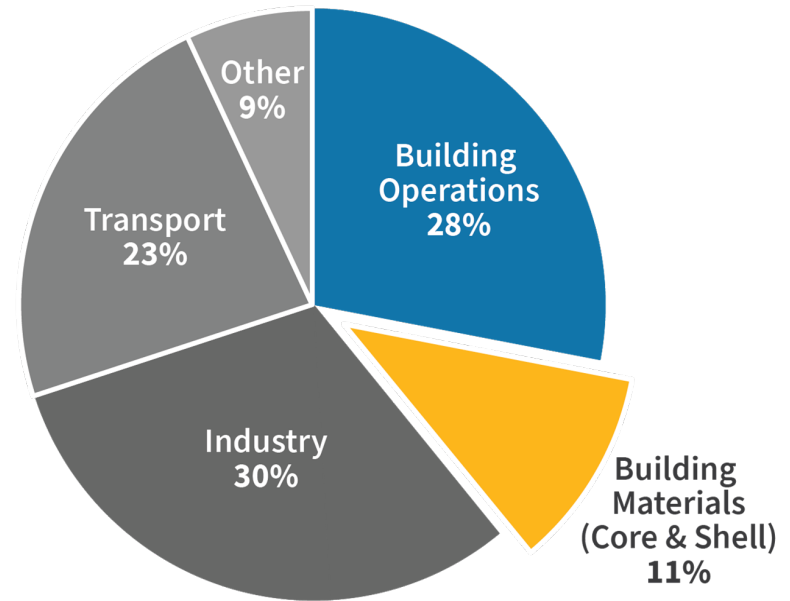


Latest Topics Explored

- Embodied Energy and Carbon in Federal Building Materials
- Sustainable Response to COVID-19 in Federal Buildings

Embodied Energy and Carbon Findings

- Building materials = 11% of global CO₂
- Percentage will grow as building operations become more efficient
- California now has low-carbon material standards
- Low-CO₂ products are price competitive
- GSA could save 633,000 metric tons CO₂e/year



Adapted from the UNEP 2019 Global Status Report

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Global energy-related CO₂ emissions by sector

Embodied Energy and Carbon Recommendations

- Proposed for all projects:
 - Environmental Product Declarations (EPDs) for 75% of material by weight or cost
- Proposed for projects above prospectus level (\$3.09M in FY20)
 - Whole building lifecycle analysis (LCA)
 - Goal: 20% reduction of global warming potential

Sustainable Response to COVID-19: Findings


- Goal was to ensure that COVID-19 safe buildings guidance does not produce unsustainable impacts:
 - That HVAC guidance not unnecessarily increase energy use
 - That cleaning & disinfection guidance not diminish indoor air quality through use of unnecessarily strong chemicals



Sustainable Response to COVID-19: Recommendations

- Proposed two-part decision guide to test out at federal buildings
- HVAC :
 - Tailor solutions to local circumstances
 - Compare ventilation vs. air treatment solutions
 - Separate out unused zones
 - Monitor IEQ & BAS operations
- Cleaning & disinfection:
 - Harsh chemicals not necessary to kill virus
 - Green cleaning may be preferable in many situations

Sustainable Response to COVID-19: Proposed SFTool.gov Pages



Risk: Surface to person transmission of pathogen. Exposure to cleaning/disinfecting chemicals.

Risk: seating components and upholstery materials can degrade when harsh chemicals are applied. Plastic laminated surfaces may degrade faster than solid surface material, depending on the chemistries used for cleaning and disinfecting.

Questions?

