



Follow Up Discussion: Social Cost of Carbon



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Social Cost of Carbon (SCC): Background

Green Building Advisory Committee recommendation:

"All federal building investment, design, construction, retrofit and location decisions should incorporate the social cost of carbon, including carbon from energy use and embedded in materials. The cost of carbon referenced should be the most current calculation as updated by the US Office of Management and Budget.*"

*Per [Technical Support Document on Social Cost of Carbon for Regulatory Impact Analysis](#) developed by a Federal Interagency Workgroup (last update 2013)

At its April 23, 2015 meeting, the Committee asked GSA to work with FEMP to examine and advise on methods to incorporate SCC.

Potential Opportunity: Required Federal Life Cycle Cost Analysis (LCCA)

OMB requires LCCA when requesting funds for capital facilities projects

Per [Circular No. A-11, Section 31](#), [Circular No. A-94 Revised](#)

NIST: [Building Life Cycle Cost \(BLCC\) program](#)

Computational support for the analysis of capital investments in buildings:

- Life-cycle costs

- Net savings

- Savings-to-investment ratio (SIR)

- Internal rate of return

- Payback period

- Estimated emissions and emission reductions

Agencies are encouraged to use BLCC for budget proposals

Other NIST Life Cycle Analysis & Life Cycle Cost Analysis Tools

[BIRDS](#) (Building Industry Reporting and Design for Sustainability)

[BEES](#) (Building for Environmental and Economic Sustainability)

Idea: Incorporate SCC in BLCC, BIRDS & BEES

BLCC currently includes carbon-related costs based on previously considered carbon cap-and-trade policies

Clarifying questions from NIST:

Focus on all greenhouse gas emissions as CO₂ equivalent, not just CO₂ emissions?

Focus only on operating energy-related carbon emissions, or also include embodied carbon emissions?

Recommendation for how the total SCC should be reported in the analysis?

A single value?

Costs by year?

Cost by specific pollutant?