

Energy and Resources Group Fall 2009 Colloquium Series (ER295)

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Supply Chain Energy Efficiency: What's the Potential?

There is growing interest in the development of tools and methods for calculating the supply chain “carbon footprint” associated with products and services. However, relatively little attention has been paid to the development of models that allow policy makers and environmental analysts to assess realistic opportunities for reducing such carbon footprints. This presentation will provide an overview of a supply chain energy use and carbon emissions model developed by Lawrence Berkeley National Laboratory (LBNL), which characterizes the key underlying technologies and processes that contribute to the carbon footprints of a wide variety products and services. The LBNL model is based on an input-output life-cycle assessment approach, coupled with bottom-up technology models for key supply chain sectors (industrial, commercial, agricultural, etc.) and fuels (electricity, natural gas, coal, etc.). The approach allows for both environmental and economic assessment of discrete supply chain technology and process improvements, which can help lead to targeted and better-informed supply chain carbon mitigation strategies. A U.S. case study will be presented to illustrate the model’s capabilities.

110 Barrows Hall / 4:00 p.m.