### engineering

# Carbon footprint tracking is good for business! What this means for real estate professionals

#### (ak) Andrew Kozak



Over the past several years one would be hard pressed to find a periodical in the engineering or real estate fields which did not contain at least one article speaking about some aspect of our industry's impact on the environment. This subject can take on a staggering number of forms from the selection of building materials to choices of refrigerants. One subject often discussed, and not always discussed with clarity, is the concept of carbon footprint.

The basic definition of carbon footprint generally agreed upon by scientists, engineers and policy makers is "the total set of greenhouse gas (GHG) emissions caused by an organization, event, product or person." Greenhouse gases are most often associated with the production or consumption of energy; however, they can also be emitted by transportation, manufacturing or construction. For simplicity of reporting, greenhouse gas emissions are often expressed in tons of carbon dioxide, or its equivalent of other GHGs, emitted. The greater the emission of greenhouse gases by a particular process or action, the greater the carbon footprint associated with that item.

An individual's, a nation's, or an organization's carbon footprint can be measured by performing a GHG emissions assessment. This assessment simply quantifies the total greenhouse gas emissions associated with every aspect of that particular item. For instance, the greenhouse gas emissions, and therefore carbon

#### Broadway Partners and Brookfield complete recapitalization

**NEW YORK, NY** According to Broadway Partners, the recapitalization of 450 West 33<sup>rd</sup> St., a 1.6 million s/f class A office building located in the city's Penn Station submarket, has been completed. As part of the transaction, Broadway and new joint venture partner Brookfield Office Properties have acquired the interests of the property's former part owner.

Under the new joint venture, Brookfield has acquired a majority financial interest, while the two companies will share control of the asset.

Howard Michaels of The Carlton Group acted as financial advisor to Broadway.

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footprint, for a particular food item would include the total emissions required to grow, process, package and transport that item to market. Once the magnitude of a carbon footprint is known, a strategy can be devised to reduce it, e.g. by increasing efficiency through technological developments, improving processes and product management, carbon capture at the source of the emissions, examination of a product's life cycle, et. al.

The main influences on carbon footprints include population, economic output, and energy intensity of the economy. These factors are the main targets that individuals and businesses use to decrease their carbon footprints. Scholars suggest the most effective way to decrease a carbon footprint is to either decrease the amount of energy needed for production or to reduce the dependence on carbon emitting fuels.

What might all of this mean to an individual in the community of real estate professionals?

First, there is the practical aspect of doing business in a marketplace where individuals are much more conscious of environmental issues and concerns. Because people are basing at least some of their decisions on these issues, the perceived values of environmentally friendly or green properties is increased. The increased rents and higher building values for properties that are perceived to be environmentally conscious are well documented in professional literature.

Also, energy efficiency, which is a big part of green building ar-

chitecture and engineering, has a positive effect on the bottom line for building owners and operators. Building features which reduce a property's energy usage and, therefore, their carbon footprint often have a rapid payback. Choosing the right energy saving feature or combination of features is becoming easier as industry professionals become savvier with the newer products and take advantage of more efficient technologies.

Secondly, and just as important, those in the real estate profession, especially those dealing with large commercial properties are often part of the decision making process as to how buildings are built, maintained and operated. Since 40% of the energy consumed in the U.S. is consumed in buildings, choices made with regard to energy consumption have an impact on our society's carbon footprint as a whole. A real estate professional developing, upgrading or operating a large commercial property has the opportunity to make a significant impact by virtue of the size of that building's system.

So, while all of us can reduce our own and, therefore, our society's carbon footprint, the community of real estate professionals has an opportunity and an obligation to make a substantial impact while gaining the benefit of increasing the profitability of their business.

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