

## Commercial Classroom: Cap on carbon emissions - by Edward Smith

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This column is offered to help educate agents new to commercial and investment brokerage and serve as a review of basics for existing practitioners.

NYC has passed the most ambitious legislation in the world to reduce carbon emissions in buildings; Local Law 97, a part of the Climate Mobilization Act was made law on May 18th. This law creates Carbon Emissions Limits for all NYC buildings over 25,000 s/f. Oil, natural gas and coal are called fossil fuels, they are used to create energy, power, and electricity, and to heat and cool our buildings. But when burned they also create what is known as "Greenhouse Gases," carbon dioxide (CO2), methane gas. nitrous oxide and other fluorinated gases. Buildings account for 39% of all CO2 emissions.

Carbon dioxide is a colorless gas that is emitted into the atmosphere during the production of energy. The amount of CO2 produced by a building can now be measured and is referred to as Carbon Emissions or the Carbon Footprint of a building.

Life on earth depends on energy from the sun, which produces heat. Surrounding the earth is the "Ozone Layer" which shields the earth from too much heat. Greenhouse gases, primarily CO2 have been eroding the Ozone layer causing global warming and the consequent climate changes. Reducing Carbon Emissions will reduce the deteriorations of the ozone layer bringing back stability to the heat flow from the sun and hopefully reduce global warming.

Passed a number of years ago, NYC Local Law 84 required the annual "Benchmarking" of buildings over 50,000 s/f, with a provision effective May 1st, to make this a requirement of all buildings over 25,000 s/f. Benchmarking is the measuring of a buildings energy and water consumption and its carbon emissions (CO2). It is required to be done using the U.S. EPA's free Energy Star Portfolio Manager tool.

The goal of the new law is to reduce carbon emissions by 40% by 2030 and 80% by 2050 from the 2005 baseline. Starting in 2024 building owners must submit annual carbon intensity reports. This

will affect over 57,000 NYC buildings. Carbon Emission limits have been established by type of building, for the first compliance period 2024-2029 with further reduced limits for the second compliance period 2030-2034.

Penalties for failure to report are a fine of 50 cents per s/f, creating a false statement is a misdemeanor with a fine of \$500,000. Buildings in will be fined annually \$268 per metric ton in excess of the emission limits.

Passed the same day by the NYC Council was a law creating a Property Assessed Clean Energy (PACE). PACE can provide building owners with up to 100% long-term financing of the costs of energy and emissions upgrades.

Other alternatives to compliance are being developed. A Carbon Offset program where a building owner with excess emissions can purchase offsets from building owners whose building are below the emission limits. Renewable Energy Certificates will reduce the building carbon intensity for production of energy by renewable sources (i.e. solar). A method to allow Carbon Trading is also being developed.

Carbon Trading is not new. Cap and Trade – "emissions trading" evolved as a result of a law passed in 1990, in the U.S.to control the power-plants pollutants that were causing acid rain. It imposes a cap on emissions. Each year, every power-plant company is given a certain number of tons of allowed emissions (so called right to pollute). To stay under the cap companies must restrict output, or switch to a cleaner fuel or buy a scrubber to cut emissions. There is another alternative. If a company does not use up its allocation it may sell what's left over; or if over their cap a company may buy extra allocations on the open market. Hence cap and trade!

The concept of a municipality limiting carbon emissions in its buildings is precedent setting and NYC's law can be viewed as a model for other cities and countries. In Washington, D.C. a similar program has been established caller the Clean Energy DC Omnibus Act.

From a real estate perspective, a whole new element has now been added to valuation. Improving the building, by reducing carbon emissions will make the building more marketable and increase building value. But new concerns are now created for buyers. They will need to examine the current emission levels, are they in compliance or not. Also, will they be complying in the future? How old and efficient are the buildings energy and environmental systems; will they have to be replaced soon to stay in compliance?

2024 will be here soon, building owners need to pay attention to what their carbon emissions are now and create a plan how to achieve the mandated levels in the future. This will take time, budgeting and doing actual improvements plus coordination with their tenants.

Hopefully the result will be a start to a cleaner, safer planet.

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