

## THE 2030 INITIATIVE

MAYOR BLOOMBERG'S 127 PROPOSALS FOR BOOSTING THE CITY'S ENERGY EFFICIENCY WIN PLAUDITS AND RAISE QUESTIONS

By Paul Bubny  
Editor

The Bloomberg administration's PlaNYC: A Greener, Greater New York, with 127 eco-friendly initiatives to green the city by 2030, earns high marks for leadership from members of the real estate community. They nonetheless point out that proposing the initiatives and realizing them are two very different things.

"If you look at PlaNYC, it's very comprehensive but it's not specific," says Joan Blumenfeld, design principal for interiors at architectural firm Perkins + Will and president of the New York chapter of the American Institute of Architects. "It lays out very broad principles, but it doesn't explain how those principles are going to be achieved. The devil's going to be in the details."

Richard T. Anderson, president of the New York Building Congress, calls the mayor's plan "a big plus for design, construction and real estate in New York City, because it strengthens the city in ways that make us more competitive. At the same time, it will raise costs, and of course there is always a question of whether or not the benefits will surpass the amount spent on these additional steps."

Along with incremental increases in construction costs, and the sheer logistics of retrofitting some 900,000 existing buildings for energy efficiency, there are political hurdles. Many of PlaNYC's initiatives will require action in Albany. Bloomberg's plan, Anderson says, asks residents of the city and suburbs to pay more—via congestion pricing—and asks the state to share authority it has traditionally claimed for itself.

"Those things are not done very easily," he



Mayor Michael Bloomberg (at podium) announces the city's proposed building code revision, which includes several energy-efficiency requirements.

says. "Yet the centerpieces of the plan require those two things."

The Building Congress has joined the coalition of environmental, civic and business organizations supporting the plan, Anderson says. The coalition intends to marshal enthusiasm among legislators and Gov. Eliot Spitzer.

"Time is critical here," says Anderson. "Even though this is a long-range plan, if they don't get some significant progress in the current legislative session, which only has so many weeks left, it could really undermine the whole effort. This is a plan that should not be undone by politics."

While acknowledging the challenges of winning support in the New York Legislature,

Chris Collins, executive director of environmental learning organization Solar One, says PlaNYC has public opinion on its side. "More and more people view the project of greening the city as one that runs parallel to, and in conjunction with, the broader effort to keep New York City globally competitive," he says. "The success or failure of the global post-industrial city is pegged not only to productivity, but also increasingly to livability and quality of life."

In 2007, the definition of livability in cities has expanded, says Collins. "It's not just good schools, a vibrant cultural scene and effective mass transit—it's air quality and asthma rates, green space and low waste, too."

New York City's buildings evidently play a major part in determining its air quality, says Michael Deane, East Coast operations manager of sustainable construction at Turner Construction. "The city just did an inventory of the city's climate footprint, and 79% of the carbon emissions are the result of buildings," he says. "We clearly have a huge impact in a negative way, but we have a huge opportunity to make an impact in a positive way if we can improve the performance of buildings."

The city's buildings account for 40% of its energy usage, and therefore will figure prominently in efforts to reduce consumption by 30% before 2030, Blumenfeld says. She points out that from a designer's standpoint, there's little guidance on achieving energy efficiency, aside from LEED, which she calls "not perfect, but the only game in town." Her firm's recently completed New York City office, at 215 Park Ave. S., has applied for LEED Gold certification.

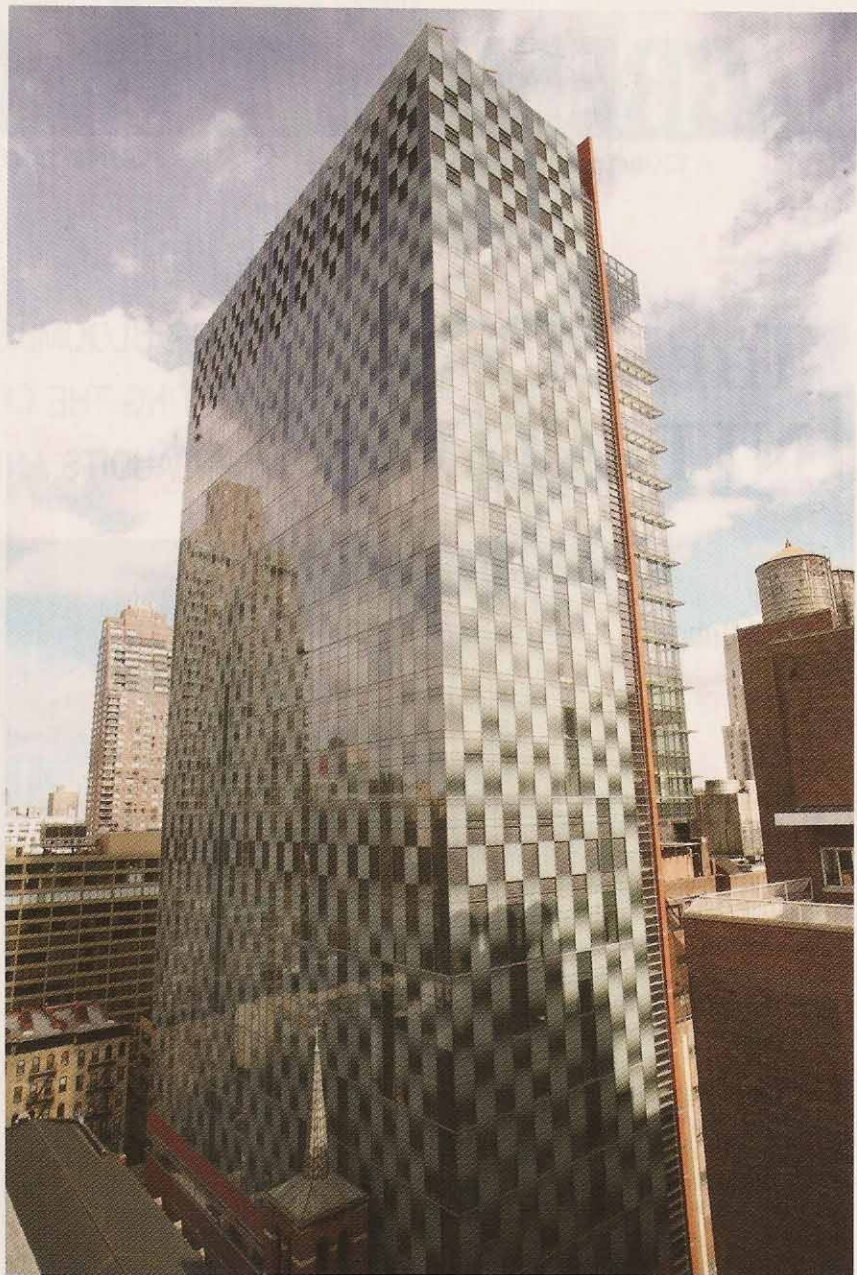
"In 2005, the City Council passed Local Law 86, which requires that all municipal projects over a certain threshold achieve at least LEED Silver," says Blumenfeld. "But that's only a very small percentage of the buildings that get built here. So there are huge questions."

Some of these questions may be answered by the proposed overhaul of the city's building code, last revised in 1968. One area the new code will address is environmental concerns: mandating greater efficiency in heating, cooling and ventilation systems and encouraging the use of water-conserving plumbing. The code would also offer fee rebates on green construction projects.

The prospect of a revamped building code is welcome news to Steve Durels, executive vice president and director of leasing at SL Green Realty. "One of the frustrations of operating real estate in New York City is some of the contradictory or unclear positions within the code because it hasn't been uniformly updated in prior years," he says. "So a fresh look and a best practices update is long overdue. I think it actually will make the construction process smoother and end up with a better result for owners and tenants."

The greening of construction in New York City had begun before the new building code, PlaNYC or Local Law 86 came into existence. Deane notes that projects built at Battery Park City had to comply with a standard "as rigorous as LEED," and that developers have taken the lessons learned there and applied them elsewhere.

"To a certain extent, I think the market is already driving owners in the direction of upgrading their buildings or developing new ones with green in mind," says Durels. "It's driven because tenants are asking about it."



**The forthcoming Memorial Sloan-Kettering Cancer Center research building is one of 200 green projects undertaken nationally by Turner Construction.**

He predicts that green features will eventually become "a top-line priority" for tenants.

Adds Deane, "Now the developers are coming to us and saying, 'We want a building that will comply with the LEED standard, because the LEED standard has become the definition of what a class A building is.' And that's a huge change."

Even so, green construction still encounters resistance from developers, according to a nationwide survey of real estate executives conducted by Bryan Cave LP. Only 12% of respondents considered green "very important" to their development plans over the next 12-18 months. Attorney Barry Ross, a partner in Bryan Cave's real estate group, notes that

the cost-effectiveness of sustainable construction is "still a matter of debate."

Collins notes that even as green construction means added incremental costs, the proposed building code's rebate plan will help offset them. "Costs will drop over time as the market attracts more and more green building firms, and as best practices proliferate. That's Economics 101 stuff."

Even without consciously striving for LEED certification, most of the major new office towers rising in New York are "fairly energy-efficient and fairly resource-efficient, just because that's what the state of the art is," Deane says. He adds that the real issue—and the real opportunity—stems from the citywide

stock of existing buildings that will have to be retrofitted for efficiency.

Taking on some of the work of refitting that building stock is the Community Environmental Center, said to be the nation's largest nonprofit energy-efficiency contractor/consultant for residential construction. "We're seeing an increase in the number of calls we're getting from people interested in efficiency work on existing buildings," says Richard Cherry, executive director. "There's always been an interest on the low-income side, but there's now an increased interest in market-rate buildings."

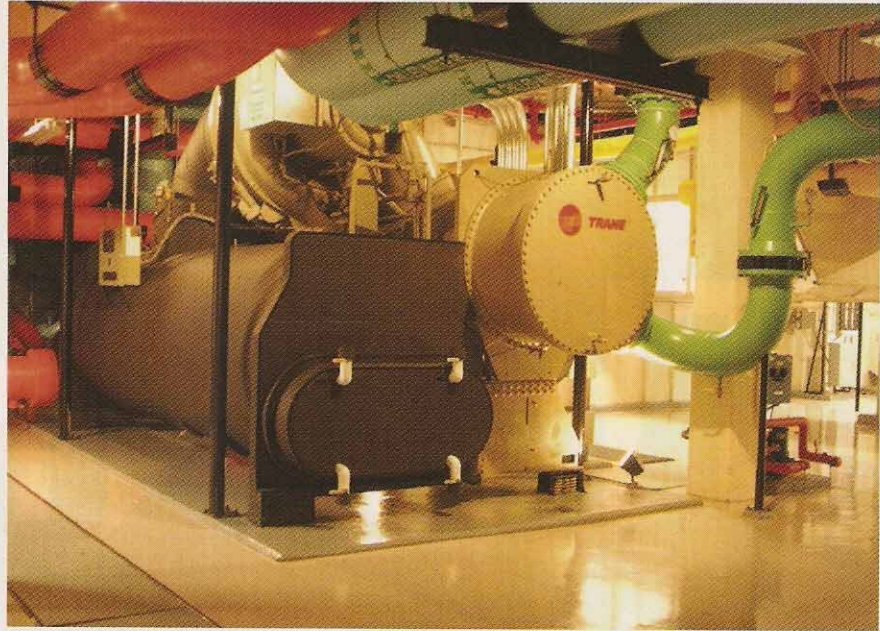
Cherry, whose organization has performed this work since 1994, says his biggest concern is "whether the capacity to deliver the service can keep up with demand." CEC intends to hire more engineers, and Cherry says the mayor's plan "will stimulate a new industry."

Yet he also worries that the influx of new players into the energy-efficiency field could affect the quality of the finished product. "You can cut a lot of corners in this work, and we've seen that happen," he says. CEC is also the founder of Solar One as well as Build It Green New York, described as the city's "only nonprofit retail outlet for salvaged and surplus building materials."

The HVAC industry, meanwhile, is also preparing to handle its own piece of the massive retrofitting job ahead of us. Rich Halley, New York/New Jersey district manager for Trane, says that while incorporating energy-

efficient HVAC systems into new construction is "quite simple," the process of upgrading existing properties takes more effort.

"We look at an existing building and we put together a total energy model" in a software



By using chillers to generate ice during periods of lower energy demand, then melting the ice to cool buildings in the daytime, HVAC suppliers such as Trane can reduce power consumption.



# Jersey City



**A CITY ON THE MOVE!!!**  
MAYOR JERRAMIAH T. HEALY

**JERSEY CITY**  
**WELCOMES YOU**  
To Business Opportunities in our UEZ zones.

Jersey City Economic  
Development Corporation  
30 Montgomery Street, Suite 820  
Jersey City, NJ 07302  
Phone (201) 333-7797  
Fax (201) 333-9323

Paid for by Jersey City Economic  
Development Corporation & Urban  
Enterprise Zone

## Jersey City's Gold Coast

- Goldman Sachs
- Pershing, LLC
- Fortis Financial Services
- JPMorgan Chase
- Merrill Lynch
- Knight Securities, LP
- Lord Abbett & Co.

JCEDC *creating new opportunities*

JERSEY CITY ECONOMIC OPPORTUNITIES



simulation, he says. "We then start to create a solution for saving energy."

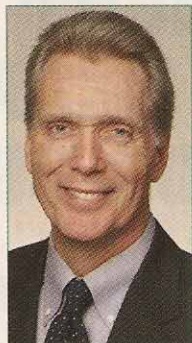
Part of that solution is replacing older, less energy-efficient HVAC equipment. Another approach, says Halley, is "moving demand": running chillers to produce ice at night, when power demand is less, and then melting the ice during the day to cool a building.

Looking at system designs can also yield energy savings, Halley says. "For example, in buildings nowadays, we can apply much colder water temperatures than we've ever done before," he says. "If we reduce the temperature of the chill water, you don't need as much of it. So we start to pump less water, and we save electricity." The company also addresses "over-ventilation," which generally leads to more air conditioning being pumped out than the space really requires.

"So there's four basic methods that you can apply and save money, and it's all existing stuff," says Halley. "The key is working with an owner that wants to save energy."

As its name suggests, Solar One's headquarters building, Solar 1—an arts and education center in Stuyvesant Cove Park—saves energy by producing most of its own electricity from sunlight. Solar 2 will be built on the present site of Solar 1 beginning in 2008. "Among Solar 2's features will be its eco-

apartment, which will include a full range of energy efficient design strategies and appliances that can be adopted for existing properties," Collins says. "Our programs will also include energy conservation workshops for landlords and supers. The building will house a multi-purpose classroom/lecture hall and



**MICHAEL DEANE**  
Turner Construction

"We have a huge opportunity to make an impact in a positive way if we can improve the performance of buildings."

exhibits on various state-of-the-art green building technologies."

Together with CEC, Solar One has developed outreach programs targeting developers, designers, builders, landlords and brokers. "We have not aggressively marketed these, focusing instead on K-12 education and gen-

eral public awareness programs," Collins says. "The two programs we have developed are focused on building performance and 'green building 101,' using our existing building as a model."

The organization also runs a "Green Renter" lecture series between October and April. "We are interested in expanding it to include lectures on issues that building managers and real estate professionals are interested in," says Collins.

Located on the banks of the East River, Stuyvesant Cove Park was formerly a brown-field site. Not incidentally, one of the 127 PlaNYC initiatives calls for rehabilitating brownfields. Some of these sites will become available to developers, while others will be set aside for parks and open spaces.

Although brownfield conversion will augment the plan's objective of offering everyone a park within 10 minutes' walking distance, "It's mostly not new parks; it's to refurbish and open up playfields at schools," says Anderson. "It's a very practical step, which we think is rather ingenious, but it's not a big park acquisition program. At the same time, the capital budget for the New York City Parks Department has increased quite significantly. This administration is fitting the pieces together in a very impressive way." —RENY

## THE SKYSCRAPER MUSEUM

39 Battery Place | New York, New York 10280  
[www.skyscraper.org](http://www.skyscraper.org)

WORLD'S TALLEST BUILDING:  
BURJ DUBAI

Exhibition on view through September 2007

WHY DUBAI?

July 18  
The New York Academy of Sciences  
7 WTC, 40th Floor

A panel of experts explores the reasons why Dubai is the locus of this century's competition for the World's Tallest Building, just as New York and Chicago were the arenas of the 20th century.

Nick Billotti, President, Turner International  
Robert Booth, Executive Director, Emaar North America  
George Elstathiou, Managing Partner, SOM/Chicago  
Jordan Gruzen, Partner, Gruzen Samton, LLP  
Moderator: Robert Ivy, Editor in Chief, *Architectural Record*

1.5 CEUs Available. Register to [burjdubai@skyscraper.org](mailto:burjdubai@skyscraper.org)

[www.skyscraper.org/burjdubai](http://www.skyscraper.org/burjdubai)



# Buildings Matter

With your help, we can create buildings that are environmentally responsible, profitable, and healthy places to live and work. Visit [www.usgbcny.org](http://www.usgbcny.org) to join us and learn more!

U.S. Green Building Council, New York Chapter