

## 5 CARBONIFEROUS

Cities are contradictions. There's an argument that living densely with public transit and public amenities is inherently green, the way to have the smallest carbon footprint. But people's ecological impact includes the full global footprint of their consumption, which isn't counted by prevailing urban studies. Those miss the fact that affluent New Yorkers fly more, own more homes, consume more imported goods. There's a directly political dimension too. Take David Koch, the richest man in New York and among the top ten on earth. He's one of the country's most devoted climate deniers. He also lives near the headquarters of 350.org, the heroic and effective climate action group. On September 21, 2014, New York hosted the world's biggest-ever climate march (the green zig-zag on this map). Protestors walked down Central Park West, past millionaires' homes and Fox News's climate-denial studios. New York is a global stage for the battle between unchecked capitalism and climate justice. Our map gives a sample of some key protagonists. Housing and labor groups are also low-carbon champions, even if they say little about it. Indeed, our map shows that many of the greenest people in New York City live in public housing. The data, which estimates zip-code-specific, per-capita global carbon footprints using a range of sources and modeling techniques, was kindly provided by the researcher Kevin Ummel, based on his 2014 study "Who Pollutes?" published by the Center for Global Development.

CARTOGRAPHY: MOLLY ROY; ARTWORK: BETTE BURGOYNE  MAP APPEARS ON PAGES 48-49.

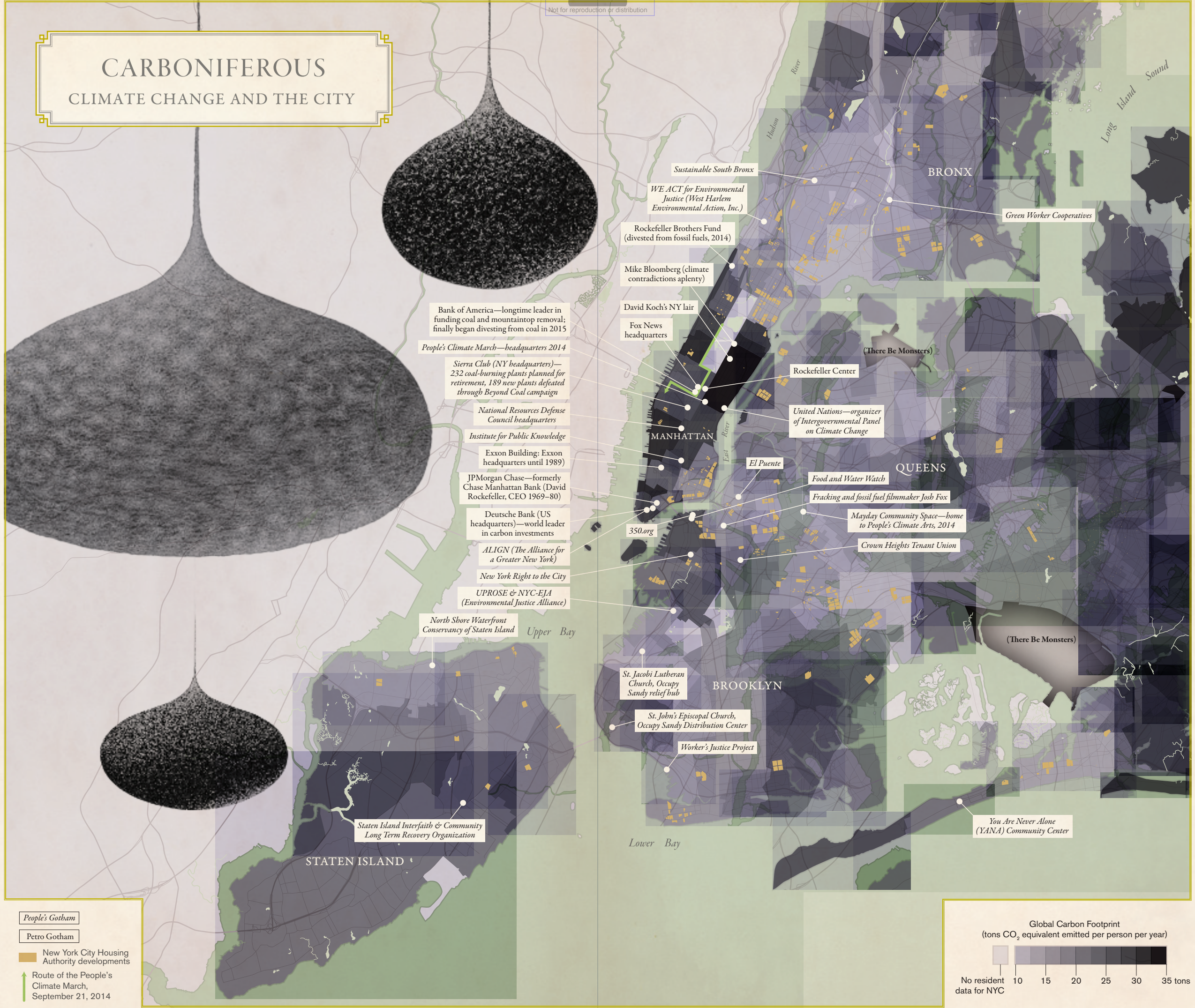
## PETRO GOTHAM, PEOPLE'S GOTHAM

BY DANIEL ALDANA COHEN

Climate change is an uneasy topic. Good news is welcome. For those lucky enough to live well in Manhattan, it's comforting to imagine that at least as far as carbon is concerned, the borough's density is right and good. Sure, the streets of midtown are clogged with cars. But walking, subways, and tall buildings with their cozy apartments and offices—all are exemplars of energy efficiency. Low-carbon virtuous, by default. This is the story told by the *New Yorker* writer David Owen in his classic essay "Green Manhattan." It's the story that's been repeated a thousand more times by Michael Bloomberg.

But the story is incomplete. And the implications are global. Manhattan isn't a snow globe, and neither is New York City. It just pretends to be one in its annual carbon-accounting reports, the city's official tallies of the greenhouse gases that cause global warming and of those gases' attribution to local activities. The unfortunate norm, which New York follows, is to use a method that ignores the emissions caused by growing and raising the city's food, ignores the carbon emitted to power the factories that assemble

# CARBONIFEROUS CLIMATE CHANGE AND THE CITY



Bank of America—longtime leader in funding coal and mountaintop removal; finally began divesting from coal in 2015

People's Climate March—headquarters 2014

Sierra Club (NY headquarters)—232 coal-burning plants planned for retirement, 189 new plants defeated through Beyond Coal campaign

National Resources Defense Council headquarters

Institute for Public Knowledge

Exxon Building: Exxon headquarters until 1989

JPMorgan Chase—formerly Chase Manhattan Bank (David Rockefeller, CEO 1969–80)

Deutsche Bank (US headquarters)—world leader in carbon investments

ALIGN (The Alliance for a Greater New York)

New York Right to the City

UPROSE & NYC-EJA (Environmental Justice Alliance)

North Shore Waterfront Conservancy of Staten Island

Sustainable South Bronx

WE ACT for Environmental Justice (West Harlem Environmental Action, Inc.)

Rockefeller Brothers Fund (divested from fossil fuels, 2014)

Mike Bloomberg (climate contradictions aplenty)

David Koch's NY lair

Fox News headquarters

(There Be Monsters)

Rockefeller Center

United Nations—organizer of Intergovernmental Panel on Climate Change

El Puente

Food and Water Watch

Fracking and fossil fuel filmmaker Josh Fox

Mayday Community Space—home to People's Climate Arts, 2014

Crown Heights Tenant Union

(There Be Monsters)

St. Jacobi Lutheran Church, Occupy Sandy relief hub

St. John's Episcopal Church, Occupy Sandy Distribution Center

Worker's Justice Project

You Are Never Alone (YANA) Community Center

People's Gotham

Petro Gotham

New York City Housing Authority developments

Route of the People's Climate March, September 21, 2014

Global Carbon Footprint  
(tons CO<sub>2</sub> equivalent emitted per person per year)

No resident data for NYC

10 15 20 25 30 35 tons

New Yorkers' smart phones and weave their clothes, and ignores the fumes spewed by planes that ferry New Yorkers around the world.

There are, however, more sophisticated methods for calculating the global carbon footprint of everything that a person (or organization) in a given area is responsible for. This consumption count paints a whole other picture.

Levels of density shape a person's carbon footprint; so do income and lifestyle. When it comes to the carbon emissions of New York's individual residents, as calculated in terms of consumption, Manhattan is the worst borough. Because it's the richest. Crowded but well-to-do West Villagers' carbon footprints are comparable to sprawling suburbanites' all over the country. It is only residents of Manhattan's less-gentrified neighborhoods who have really low carbon footprints. They reside by the island's northwest and southeast tips, in zip codes anchored by public housing.

And so, the image of New York City that should inspire the world's would-be low-carbon urbanists is the combination of towers run by the New York City Housing Authority (NYCHA) and the outer boroughs' mosaic of mixed-income, mixed-use neighborhoods. Sometimes beautiful, sometimes plain, from Woodside to Clinton Hill, a still-democratic New York teems with life and ecological promise. This isn't to suggest celebrating the poorest New Yorkers' lack of income, their inability to consume. On the contrary, the thing to celebrate is what the radical urbanist Mike Davis in his essay "Who Will Build the Ark?" calls the "cornerstone of the low-carbon city . . . the priority given to public affluence over private wealth." Public housing, well-stocked libraries, accessible transit, gorgeous parks: these are democratic low-carbon amenities. And they're the political achievements of working-class New York.

Still, your eyes are narrowing. Surely New York City has more to offer the politics of global warming than a stack of individuals', even neighborhoods', moral balance sheets, with pounds of carbon standing in for sins. And you're right. New York isn't a political snow globe either. Woven into the city's local geographies of consumption are global geographies of power. From the United Nations Security Council to Citibank boardrooms to Fox News studios to the underventilated activist meeting room on Beaver Street, New York is a city where global political networks are knotted together. Here, people combine resources and symbols; they create stories, projects, and policies. All of this influences the ways that other cities try to organize themselves. And it helps shape the global debate about who matters to the climate and how. What happens here literally remakes the atmosphere—in direct and indirect, obvious and subtle ways.

The stakes are high. The carbon dioxide emissions of the world's cities make up about half of the world's total. Between now and 2030, argues a thorough report from the London School of Economics' Cities Centre, smart pro-density planning by just 724 of the world's largest cities could save 14.4 gigatons of carbon. That's over half of the currently recoverable carbon stored in Canada's tar sands. A lot of carbon. So the question is: What counts as smart? And what can New York contribute to that conversation? Greenwich Village is minuscule. But thanks to the activist and writer Jane Jacobs, the neighborhood became a global template for living well. Then again, Jacobs wasn't the only New Yorker working to reshape the world all those years ago.

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On May 20, 1960, in the New York Plaza Hotel, the petroleum heir and vice chairman of Chase Manhattan Bank, David Rockefeller, gave a speech called "New York: Economic Center of the World." It was prophetic. With the global economy becoming more complex, Rockefeller said, "there is a growing need for a headquarters city, a focal point for decision-making." He urged the construction of a downtown World Trade Center to

enable the expansion of the city's already "marvelously varied and skilled facilities." In other words, an agglomeration of lawyers, advertisers, public relations experts, management consultants, and other professionals—an ecology of skills and talent in support of globe-wrangling financiers.

Rockefeller also insisted that money ruled most effectively when joined to beauty and wisdom. New York's centrality, he said, required that "cultural and educational facilities [be] so developed that the city would exercise leadership in the arts." The city needed "new museums and theaters." For particular praise, he singled out the forthcoming Lincoln Center for the Performing Arts.

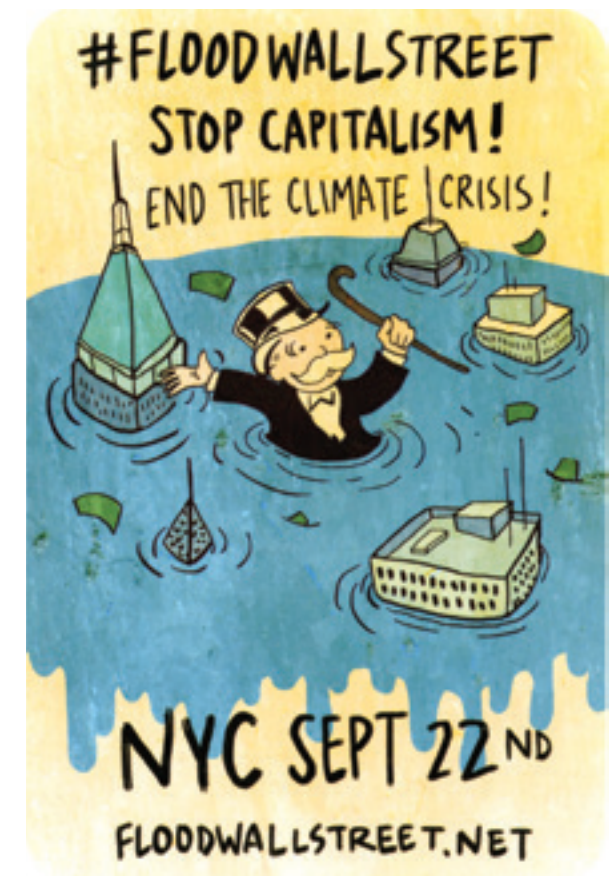
We don't need to give Rockefeller undue credit for what came next. Still, something of his vision was realized. The city that, as he pointed out, was then the world's largest manufacturing center, has since outsourced most physical production. Rockefeller's proposed World Trade Center revitalized Wall Street.

New York's capitalists traded mechanical levers for remote controls. The economic elite turned to finance, real estate, knowledge, and culture. In the age of globalization, New York became a machine for converting far-off greenhouse gas emissions—in the form of smokestacks, factory farms, and sprawling suburban development—into local money and glamour. Manhattan's glitz laundered the distant, dirty combustion of fossil fuels, just as local laundromats and hair salons recycled the moneys of the Mob. And Manhattan did it in style.

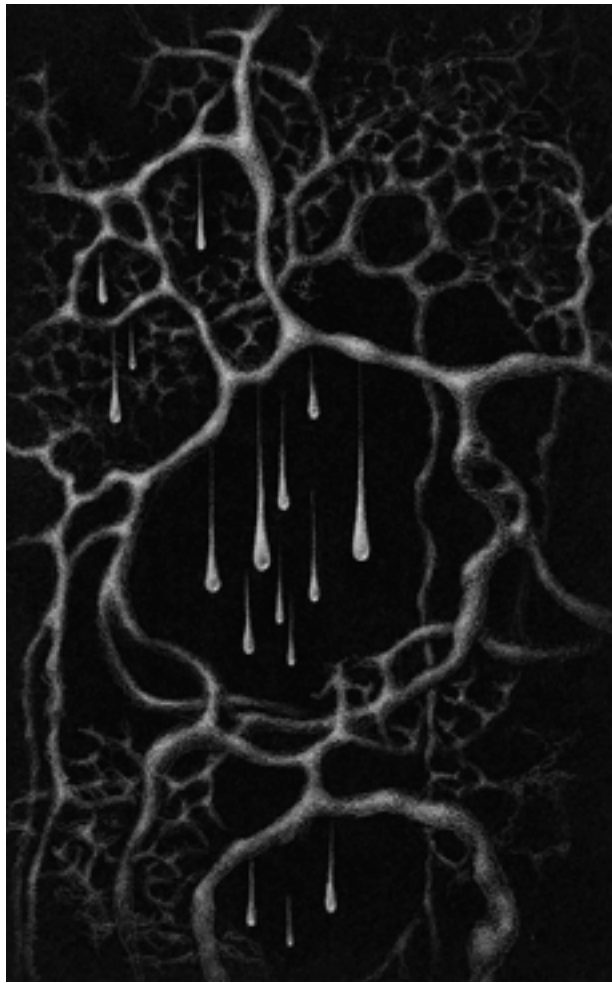
Lincoln Center's main theater opened four years after Rockefeller's speech, becoming home to the city's ballet. Today, it bears the name of another oilman, David Koch, who pledged \$100 million for its restoration. Koch also gave \$65 million to the Metropolitan Museum of Art, to rebuild its four-block public plaza. And thanks to Koch's donation of \$20 million to the American Museum of Natural History, his name adorns two great halls of dinosaur bones. Sometimes you have to look over your shoulder. As climate change hastens the next Great Extinction, there's an eerie, retrospective futurism to spending oil profits on the veneration of vanished giants.

David Koch is Charles Koch's brother. Together, they own the second largest privately held corporation in the United States. They fund a vast network of right-wing causes, of which the Tea Party is the most famous outcome. They've destroyed one attempt by American senators to put a price on carbon, and they're determined to block the next. Meanwhile, on each side of Central Park, they gild the museums and theaters that are prosperous, cultured, and carbon-rich Manhattan's most attractive alibis.

But there is more to Manhattan's moneyed interests than the Kochs. Wall Street as a whole has poured untold billions into oil and coal. The borough's 1% isn't exclusively invested in carbon, however. In the summer of 2015, the Street soured on King Coal, slashing direct investments into the sector. Just as interesting is the way that the Street is multiplying its twenty-first-century bets. The Street is directing more money and prestige to all manner of low-carbon and resiliency companies. Gotham isn't determined to drown



Postcard for Flood Wall Street demonstration, 2014



Bette Burgoyne, *Inside*, 2010

Manhattan in seawater, only to drown itself in dollars. Problem is, the difference between the two goals is slight.

Take Deutsche Bank, an early adopter. Its New York headquarters are at 60 Wall Street—the building whose atrium served as a meeting hall for Occupy Wall Street protesters during that movement's heyday. By 2008 Deutsche Bank's innovative "Green Climate Fund" was already worth \$2.9 billion. In the main, Deutsche's investments have been ploughed into green tech, like solar panels. But the fund also balanced its optimism by investing in the prospects of climate catastrophe. It took stocks in Veolia, which builds desalination plants for increasingly scarce water. It invested in Monsanto and Syngenta, agro-business companies trying to engineer drought-resistant crops for a warming world. It put money into the giant fertilizer multinationals Yara and Agrium, as increasing carbon in the atmosphere is expected to drive down grain yields. And it invested in Royal Boskalis, a Dutch dredging company that rebuilt an island in 2004 in the Maldives—a country that rising seas are swallowing.

Other Wall Street investors are plowing money into water treatment companies, foreign farmland at the frost line, even a mosquito genetic engineering company, whose business is booming as global warming expands the sting zone of dengue-bearing bugs. Former New York mayor Michael Bloomberg donates to the Sierra Club's anti-coal campaigns but is a vocal supporter of fracking. Goldman Sachs and other Wall Street banks are big proponents of pricing carbon; in fact, they're eager to sell their expertise. Hope for the best, hedge for the worst. Profit either way.

After all, there will always be islands of privilege to which the winners of all these bets can retreat. Maybe Manhattan will be one of them. Maybe not. Maybe one laundromat must close so that another can open. Thankfully, it is not just Petro Gotham that is taking advantage of the city's "marvelously varied and skilled facilities." The thing with skill and talent is that it's wielded by all kinds of people. Infrastructures of capital, densities of intelligence, and creativity and purpose—they don't belong to the Street alone. Capitalism is a system of contradictions. People don't always do what they're told.

And some smart people are stubborn. Occupy Wall Street, even at the peak of its 2012 American Autumn, probably never managed to put over 50,000 people in one spot. On September 21, 2014, the People's Climate March managed over eight times that number: more than 400,000 marchers assembled above Columbus Circle, streamed past Central Park, cut through midtown, and finally spilled through Hell's Kitchen, fronted by colorful banners, giant yellow flowers, bright orange life preservers, and tents perched on poles. Is marching bigger and better than occupying? Patient planning better than spontaneous outburst? Or is that like asking if cakes are better than flour?

"There are so many ways you can look at the People's Climate March and see Occupy infrastructure throughout it," said my friend Tammy Shapiro, who was deeply active in both. The march was largely organized through a networked hub system inspired by the cross-country InterOccupy network. Most of the march's art pieces were built in the May-day space housed on Starr Street in Bushwick, which is mostly run by former Occupiers. The march's exclamation point was the next morning's "Flood Wall Street," a defiant denunciation of the Street's global climate-change complicity. Thousands strutted past Zuccotti Park in exuberant rage, then piled up and roiled at the edge of Wall Street. It was a show of confrontation that the march had been polite enough to only whisper.

In a sense, Flood Wall Street realized a concern for climate change long dormant in the Occupy movement. After Hurricane Sandy in 2012, a network of Occupiers sparked the 60,000-strong relief network called Occupy Sandy. Seizing on the instincts of some of the original Occupiers, the network made the atmosphere a central concern. Still—as I learned at a postmortem summit at a waterside bar in Bay Ridge months later—many key activists wished they had done even more to connect local inequalities laid bare by the storm with the imperative to slow global warming everywhere.

Meanwhile, if the People's Climate March owed a lot to Occupy, it also drew on groups that never flocked to Lower Manhattan to wiggle their fingers. The march started as a partnership—proposed by the climate activist group 350.org and the broader online activist group Avaaz—with the Climate Justice Alliance, a national network of organizations, based in poor communities of color, which have borne the greatest brunt of urban regions' toxic pollution and are now most vulnerable to climate-linked extreme weather.

This was no trivial coalition. "We live in a very segregated society, by class, color, and communities," Luis Garden Acosta told me after Hurricane Sandy. Acosta is a founding leader of El Puente, an environmental justice group based in Williamsburg, Brooklyn. He continued, "Nowhere is [that segregation] more starkly apparent than in the environmental activist community." Bridging that gulf, even for the march, took long and painful meetings. Likewise for building partnerships with the city's powerful big unions. "To change everything, we need everyone," ran the climate march's unofficial kicker. It was easier said than done.

Through the summer of 2014, the march's organizers gathered in midtown, in a grim office near Grand Central. The tall, gray neighborhood that helps coordinate carbon capitalism served the same purpose to that system's enemies. By day the growing ranks of staffers, seconded by green groups, planned the family-friendly march. By night they combined with the veterans of Occupy to plot the more confrontational Flood Wall Street.

There were immediate results. New York mayor Bill de Blasio, who was elected with rhetoric and political supporters borrowed from Occupy, saw what was coming. He polished up a plan to slash the city's greenhouse gas emissions by 80 percent by 2050, building on and accelerating the prior administration's commitments, but this time with more emphasis on affordable housing. De Blasio announced the plan on the eve of the march. Months later, he reframed the city's "sustainability vision" in terms of social justice.

Will those emissions cuts actually happen, showing the world that urban climate politics can be turbocharged by long-standing social justice campaigners? Can New York divest itself of Petro Gotham, instead prioritizing democratic, low-carbon communities? Can the Occupiers' irreverent networks build lasting power with the more stable, rooted community groups of the climate justice movement? What sound like local questions are also global questions. Will a red-green coalition transform New York into a democratic mural that shows other cities how to slash all those gigatons of carbon in an effective, democratic, and egalitarian way? What will it look like if it does?

When I close my eyes and picture a low-carbon People's Gotham, I don't start with gleaming office towers certified by cheesy acronyms. I don't picture broad green bike lanes lining Manhattan's avenues. At the edge of my mind, kale grows on a rooftop. But that image is out of focus.

Sharper is my vision of the 7 train, just as it is, packed and multicolored. I imagine the boroughs crisscrossed by comfy buses running express. They leave the G train in their dust. I see red-brick NYCHA towers, the city's venerable affordable housing. Wrapped in new exterior skins and patched up inside, NYCHA's buildings could undergo what experts call a "deep energy retrofit," which would massively reduce their energy expenditure. Such a program wouldn't only create thousands of local jobs. It would serve as a kind of regional innovation and industrial policy, training technicians and improving techniques to apply to other buildings in and beyond New York. An urban green new deal, anchored in working-class New York.

Envision NYCHA as a whole, which houses 400,000 people, cutting energy use by three-quarters (or more) while using the renovation process to clean out mold, seal the cracks and crevices where pests now thrive, and increase leaf canopy. With these and other measures, NYCHA could become the world's largest—albeit decentralized—green city, an outpost of a far-off future in tomorrow's New York. I can hear—I can *smell*—the packed, endless meetings at which residents and designers hash out the specifics.

This vision, with its contrast of detail and grandeur, reminds me of other spaces that I've seen, other moments I've spent in this emerging People's Gotham. I recall the haunting, yellow-tinged beauty of the City University of New York's Lehman College campus in the Bronx, with its carved stones and winter trees, framed by a third-floor classroom's window as curious undergrads debate the meaning of the urban environment. I recall the great interior hollow of Judson Memorial Church, where in the fall of 2012 the Indian writer and activist Arundhati Roy told Occupiers that they numbered less than a hundredth of the crowds mustered in her home country, but since the world media was watching, it was worth it, so long as the local Occupiers maintained a healthy sense of perspective. I recall the yet vaster interior of a warehouse by the water in Sunset Park in Brooklyn, the site of a youth climate justice summit hosted by the environmental justice organization UPROSE. By the time I get there, late and sweating on my bike, the program is wrapping up, the teenagers eating and jostling each other, flirting.

You can recite a thousand objections to this vision. First and foremost, you can point out that the core of the People's Gotham, its dense, low-carbon, working-class neighborhoods of color, is under assault—from finance-backed developers and "creative economy" gentrifiers and from the cops who follow them. But those neighborhoods are also fighting back. When I think of a frontline struggle in New York's climate politics, of accidental low-carbon protagonists, I also think of the Crown Heights Tenant Union—a multiracial, multiclass alliance defending affordable density. Their neighborhood may not be threatened by a hurricane. But it's on the front lines of New York's battle to defend, even to expand, the shared character of its affluence.

Here is the bright line linking struggles to defend the democratic fabric of the city, the rights of workers and of the poor who live there, and the possibility of defeating Petro Gotham. The threads that weave everyday consumption and global warming, that weave localized battles for a decent urban life and the great planetary effort to decarbonize prosperity, these are the threads of politics. And a great global city's politics are more open-ended, more awe-inspiring than the swirl of carbon in the atmosphere. While Wall Street hedges its bet, the People's Gotham musters to go all in. 