**From Global Fact to Local Act:**

**Climate Change Policy in New York City**

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**Abstract :** Climate change and emission reduction policy is a clear case in which alternative interpretations of meteorological facts are framed through differing interests and political considerations. This paper looks at environmental policy in New York City as it transitioned from the Bloomberg mayoralty to the de Blasio, and from the Obama administration to the Trump while under the shadow of the UNFCC Paris Agreement. New York City's actions on energy consumption, transportation, pollution, and habitat restoration provide ample opportunities to look at climate change mitigation and adaptation strategies as examples of lawmaking shaped by opportunities contingent on political relationships, coalitions, and governance regimes with partners at the urban, state, national and international level. Especially for urban actors, climate change is characterized by a "think global, act local" mentality, where local action is predicated on local political circumstance creating a specific reading of global climate reality so that the global can be harnessed by local policy entrepreneurs.

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It’s become rote to point to Rachel Carson’s *The Silent Spring* as the national kickoff for the modern environmental movement (Garb 1995, Lepore 2018), so a popular myth around mobilizing for environmental causes is that you need some cultural moment to make an environmental cause suddenly urgent. Schattschneider observed that, “The outcome of every conflict is the determined by the extent to which the audience becomes involved in it (189).” For New York City Superstorm Sandy 'involved' the entire tri-state area, and now Sandy - and extreme weather events brought by climate change - is a persistent presence in popular discourse and media on topics ranging from rebuilding and repairing after the devastation, environmental adaptation efforts as well as seemingly unrelated new environmental policies, national and international efforts to respond to climate change, and every minor but notable local weather system in addition to other major weather events like this past year's Harvey, Irene and Maria. This issue of *problem definition* is central to paring any policy solution to a policy problem and is certainly relevant to rhetoric surrounding climate change where the causes can seem overwhelming and dispersed and the effects can seem far off, spatially or temporally. Layzer (2006) argues that the struggle around environmental issue hinges on three attributes: translating scientific explanation into causal stories, shifting attention to economic costs and benefits, and dramatizing the risks of inaction. While Sandy hit all three marks by seemingly proving a increased probability for ‘severe weather events,’ imposing huge economic costs on New York’s and the world’s economy, and providing a dramatic story of disaster to a huge segment of population as well as the media heart of the US, that narrative thread was only ready to be pulled after years of priming by political leadership in New York, particularly Mayor Michael Bloomberg, and then sustained by Bloomberg, and his successor Mayor Bill De Blasio.

This policy-making confluence of a global condition with a local megaevent in a megalopolis, with big-city mayors and media with big-city and global aspirations presents the puzzle into which this paper delves. Further complicating the policy arena is another New York political and media personality with huge impact: Donald Trump. As President Trump stormed into office in January 2017 he represented a dramatic divergence in his stance on the science, economic costs, and perception of risks related to climate change, and muddied the direction of national policy and America’s role in international agreements like the United Nations Framework Conference on Climate Change’s (UNFCCC) Paris Agreement from 2015. From this mire the research question underpinning this paper focuses on policy outcomes in New York City. What forces shape politics around the environment and climate change, and when and what kinds of policy outcomes can we expect?

Hypothesis one: A number of relevant particular features of New York have made climate change a salient public issue. These include: partisanship/ideology of public and public opinion, superstorm sandy and weather events and media coverage of those events, persistent leadership from Mayor Bloomberg, and Mayor De Blasio’s progressive agenda.

Hypothesis two: Policy entrepreneurs deploy climate change (define it as threat) in two ways: to justify direct policy action, and to justify indirectly related policies to climate change – “a piling on” effect to get environmentalists and those concerned with climate change to support adjacent/indirect policy actions. In this way environmental and climate change concerns can become a common agenda item around which to organize a coalition or regime (Mollenkopf 2003; Stone 2005). European Union directives that all new policies must take climate change into account is an example of indirect environmental action, while recent federal court rulings that Bureau of Land Management must take climate change into account before authorizing petroleum extraction on federal lands are a more direct example of climate change effecting policies.

American cities are limited by the American federal system in pursuing policies, because of limited resources, intercity competition for private investment, and limited ability to capture returns on the investments they do make (Peterson 1981, Savitch and Kantor 2004). From a purely rational collective action perspective there is little reason for individual cities to take local action on a global common good like the climate (Urpelainen 2009), but there is ample examples of cities acting to preserve the climate and limit greenhouse gas emissions (Bulkeley and Betsill 2003), and there are examples of state action as well (Rabe 2004). One obvious step at conquering the pitfalls free riders is organization, and we see international and regional initiatives for common action, tying together cities, states, organizations, and even corporations as we see with the Global Covenant of Mayors (<https://www.globalcovenantofmayors.org>), the C40 organization of cities (<http://www.c40.org/>), ICLEI – Local Governments Sustainability (<http://iclei-europe.org/>), and America’s Pledge on Climate (<https://www.americaspledgeonclimate.com/>) which includes 15 states, 455 cities, 1,747 businesses and 325 higher learning institutions in the United States committed to matching emission reduction targets in the Paris Agreement. One such 'pledged' city is New York, which has pledged to reduce its greenhouse gas emissions to 20% of its 2005 levels by 2050, referred to as the “80x50” pledge.

New York City is limited like other American cities, but it has also been characterized as contested, dual, and ungovernable. We can observe the struggles, failures and successes of creating a cohesive coalition or regime capable of putting together the interests of private capital and business relied upon for urban investment with a fractured political and bureaucratic system responsible for managing public investments and distributing federal monies (Mollenkopf 1983; 1992). This paper is interested in looking at the role that Sandy played in the how power was used by the Bloomberg and De Blasio coalitions to get projects done that they wanted.

Aesthetics of disaster and framing climate change

Superstorm Sandy hit New York City like a hurricane. But it was more than a hurricane, as the storm surge washed over dunes and into neighborhoods, flooded tunnels, basements and ground floors, and stretched its angry tendrils up canals, creeks, bays and inlets to hit low lying areas seemingly far from the direct assault of the Atlantic Ocean on the southern reaches of Staten Island, Brooklyn, Manhattan, and Queens. For a time, Sandy was the second most economically devastating storm to hit the United States, after Katrina, but it has since been surpassed by Harvey and Maria. The water's receded but the devastation remained; Sandy has left an indelible imprint on the spatial and political geography of the city. Three aspects have made Sandy relevant in New York politics, in terms of the 'aesthetics of disaster' that judge the merits of disaster in terms of morbidity and capturing the attention of the population (Levine 2015). The first is the most obvious; the level of destruction is significant and wide spread. But a mess is only relevant for as long as it lasts and for as long as it is remembered.

So, the second is that the wounds that Sandy inflicted on New York still remain; repairs are ongoing, funds are being allocated, and politicians campaign on facilitating government assistance to storm victims. The media regularly returns to the imagery of the storm, of hollowed out houses, of construction sites, and of residents waiting on the city for repairs. New Yorkers are regularly reminded that big money capital projects need to be storm resilient, or are necessary repairs. The storm was over 5 years ago, but Sandy still gets frequent attention today. In addition, while covering Sandy, the media’s normal admonition to cover ‘both sides’ of a scientific debate on climate change is reduced as they simply cover the effects of this specific storm and the rebuilding efforts subsequent to the destruction wrought. Each story on Sandy thereby becomes a reminder on the risks of climate change and the dangers that rising tides, weather events, and catastrophes pose to life and capital.

Finally, the third aspect of the political aesthetics of Sandy that keeps it relevant is the years of groundwork laid by Mayor Bloomberg that primed New Yorkers to understand severe weather events as an expression of climate change. Bloomberg's mayoral style was paring a neoliberal entrepreneurial business-like CEO with a father-knows-best paternalistic mayor as parent of the city. Climate change policy played to Bloomberg's strengths as he proposed rebuilding and rebranding the city as a more livable, bike-friendly, green city of the 21st century that could also be a global leader in tolerance, public health programs aimed at individual consumption, and, most importantly in regards to the climate, natural stewardship. His electoral coalition depended on liberal white middle class support in a majority-minority city, so he focused his messaging at them by including 'post-materialist' issues like tolerance, health, and conservation (DeLeon 2003). Risk averse and financially minded, Bloomberg routinely referred to the economic or budgetary effects of weather events both short term for issues like snow removal, but also long term for the attraction of capital in areas at risk from rising sea-levels. Climate change was going to cost New York. He got lambasted when dire predictions about hurricane Irene in 2011 did not bear out. At least part of New York responded as people frequently do when risks are not do not result in actual harm - that the predictions were a hoax and risks overstated. Sandy came the following year and was seen as proof positive that climate change did indeed pose a serious threat to New York. Now each new extreme weather event, from a heat wave to a snow storm is met with a knowing sigh, “climate change,” and a lot of that has to do with Bloomberg’s 12 years repeating the refrain to the news media and creating the frame through which New York receives their weather coverage. This perception of threat to the people, built environment and land of New York now drives climate change policies in the city toward mitigation efforts to reduce green house gas emissions, and adaptation measures to protect against the effects of climate change.

Climate change policies in New York City

Mayor Bloomberg's environmental policies were a mixture of several high profile modifications to the built environment of the city and its transportation network and smaller neoliberal incentives to private builders. His high profile changes were a massive extension of bike lanes, pushing for capital fund extensions to the several subway lines, planting a million trees, the High Line elevated rail line park, closing and repurposing city streets for plazas, parks, bikes and pedestrians and the CitiBike bike share program. Some of these policies reflect Bloomberg's paternalism, through an effort to make New Yorkers to spend more time outside and physically active, especially the bike lanes and CitiBike program. However, they also represent what Harvey has called an 'entrepreneurialism' mode of governance. The High Line, street plazas, and CitiBike are efforts to compete for tourism dollars and are aimed at these non-resident city users in addition to New Yorkers. The policies also use public-private partnerships to achieve their goals, from non-profit, gardening stores, and private property owners lead on planting one million trees, to a corporate sponsorship for a privately run enterprise with CitiBike.

Less directly visible as governmental efforts on parks and transportation, but perhaps more significant long term was Bloomberg's efforts to make buildings in New York City more efficient. In 2008, the mayor created an "Urban Green Council" of 200 experts to provide policy recommendations on how to make the city more environmentally friendly and sustainable (*Greening the City's Code and Regulations* n.d). The resulting *Greener, Greater, Building Plan* required a number of programs centered on green house gas emissions. These include supplementing job training programs for more energy efficient construction and rehabilitation, recording an emissions monitoring annual benchmark, water and energy supply and conservation efforts, energy efficient lighting in commercial buildings, and requiring that buildings over 50,000 square feet meet certain energy efficient marks and retrofits.

Other environmental efforts made by Bloomberg were unsuccessful. A regulation requiring that shops charge shoppers for plastic bags died in New York before being successfully passed in other jurisdictions. A congestion pricings surcharge on certain areas of lower Manhattan based on a program in London was similarly defeated. I contend that both these failures are instrumental in understanding the Bloomberg coalition when juxtaposed with his successes. First, they split his electoral group, that wanted environmental protections, but not additional surcharges for their behaviors. Second, they were slightly off-brand as they did not invest in rebuilding a new city; there would be almost not visible ramifications of these policies. Still, they were attempts to keep up with other global cities, as New York had down with CitiBike, and leaders in environmental policies. Finally, they lacked corporate support, either from specific businesses or from a public-private partnership.

Having already questionably extended his service of mayor past the two term limit, Bloomberg was only Mayor for the first year after Sandy. That gave him time to frame the issue. Taylor and Levine (2015) argue that catastrophe born from natural disasters pushes people past a belief that government intervention or human activity can protect them which results in an “anomie that invariably results form catastrophe, threatens the physical and mental ability of those most affected to survive cope and endure.” This sort of anomie gives politicians a window to redefine institutions, and policy scope (Vance 2010). Bloomberg used it to state the case for climate change mitigation and drew on inspiration from the recovery from 9/11 as a positive example, but left the neoliberal state intact. However following Katrina in there had been a referendum on how 'natural' natural disaster were when overlaid on human geographies of economic inequality (Smith 2006; Passavant 2011; Taylor and Levine 2015). Katrina was later recast as "The Federal Levee Failures of 2005" to reinforce a trope of federal, state, and city failure to adequately address both persistent poverty and basic adaptation protections against storm surges in known flood prone urban areas (Campenella 2015).

In his repudiation of Bloomberg, De Blasio focused his message on bringing government attention to the outer boroughs, and economic policies of redistribution from the wealthiest New Yorkers to the rest. He activated a different electoral coalition composed of people wanting more economic, social, and policing justice often in very material terms like investments in low-income housing or De Blasio's centerpiece so far: universal pre-k education. He has rebranded Bloomberg's planning and sustainability project PlaNYC as OneNYC. OneNYC has four visions, each with three to seven pertinent policy areas. The visions are growth, equity, sustainability, and resiliency. As far as I can tell all environmental policies are found under the sustainability vision and include the 80x50 emissions reduction pledge, zero waste, air quality, brownfields, water management, open space and natural resources. "To reach 80 x 50 the City must reduce 43 million metric tons of greenhouse gas emissions: nine million metric tons from power production, seven million metric tons from personal and commercial vehicles, two million metric tons from the disposal of solid waste, and the remaining 25 million metric tons from energy used in buildings (OneNYC 2016)." The emissions reduction plan touts several successes, all started under the Bloomberg administration including the Retrofit Accelerator which has 1,000 buildings, and the NYC Green Buildings Program which has 7,000 buildings.

De Blasio's environmentalism is more informed by environmental justice movement. One example of that is changing private garbage hauling to reduce emissions in the city. Another is curb cuts to allow natural drainage, as opposed to engineered sewage lines, with trees and wildflowers on the surface for filtration but also neighborhood beautification in under-invested districts. Plans to build dunes and wetlands to absorb some shocks from tidal flooding have continued under De Blasio.

But when it came to repairs and rebuilding after Sandy, De Blasio has been stymied by coordination with FEMA, private contractors, homeowners, and a variety of interested bureaucracies. Vital repairs to the L train subway line, which has a daily ridership of about 300,000 people, have been put off until 2019. New York City Public Housing Authority (NYCHA) has delayed in awarding resiliency retrofit contracts, so has thus far only used 60% of FEMA funds. Likewise, the Build it Back campaign drags along in rebuilding and raising single family homes in Brooklyn, Queens and Staten Island. This creates a problem where he, and those with a progressive agenda, are seen by city voters as ineffectual in much the same way Louisiana politicians were after Katrina (Taylor and Levin 2015). The people on the south shores of New York envisioned a grand sea wall, a capital investment that would have cost billions, but are instead getting dunes and stilts, so they don't feel protected (DeBoer 2017). A general limitation on imagination has stymied the De Blasio response - it's neither a grand capital project, nor a repudiation of housing segregation and NYCHA public housing failures. As Boyer (2015) points out in New Orleans after Katrina, developers saw and seized an opportunity to move urban planning away from grand schemes of community betterment and justice and replaced it with a regulatory scheme where government go out of the way of private investments. Additionally, an assembly member representing a storm-ravaged district in Brooklyn was charged with improperly using FEMA funds for her private properties prior to her election.

As with the above examination of failed policies during the Bloomberg mayoralty, looking at a stalled piece of legislation introduced by De Blasio can help to display how his coalition is put together. In September 2017 De Blasio announced that legislation that would require buildings over 25,000 square feet to undertake energy efficiency measure such as new furnaces, solar panels, etc. “The new targets will reduce total citywide greenhouse emissions 7 percent by 2035, the single largest step yet taken to reduce greenhouse gas emissions, equivalent to taking 900,000 cars off the road, and spur 17,000 green jobs performing building retrofits (Office of the Mayor 2017).” Council Member Costa Constantinides introduced the bill in October, but after housing advocates raised the issue that building owners might use mandated refurbishment and construction upgrades to raise rents or chase out tenants in rent stabilized apartments the bill died. Constantinides and De Blasio intend to reintroduce the idea next council session, but want buy in by housing advocates and a deal with the state authorizing changes in rent stabilization regulations.

2017 - Trump, the United Nations, and Bloomberg

Of course, New York City is part of the United States as well as a global city embedded in international institutions. President Obama had adopted the requirements of UNFCCC Paris Agreement by executive order, but President Trump followed through on campaign promises and withdrew the agreement in the summer of 2017. This left a vacuum on climate policy at the national level in the United States, which only partially been filled in the waning days of the Bush administration and some meager initiatives during the Obama Administration on emissions. So it was a return to a federal scheme that had allowed states and cities to participate in the climate change as identified by Rabe (2004) and Bulkeley and Betsill (2003) respectively. The vacuum left space for both De Blasio and Bloomberg to move into. De Blasio announced his emission reduction package as outlined above and engaged in national and international tours to present a urban progressive alternative to the Trump agenda, including signing on to America's Pledge on Climate Change whereby states and cities follow the 80x50 goals and yearly reporting of emissions as is required for all parties signed onto the Paris Agreement. It is worth noting again that New York was already issuing yearly emissions reports pursuant to a law enacted from Bloomberg's *Greener, Greater Building Plan*.

Similarly, De Blasio was able to sign up to America's Pledge because of the efforts of Bloomberg. However, this time it was made possible through activism by Bloomberg as he stepped into the international vacuum that Trump had left behind. Combining his philanthropic efforts, with a political campaign and his appointment to United Nations Special Envoy for Cities and Climate Change Bloomberg has spearheaded America's Pledge, as well an international counterpart, the Global Covenant of Mayors for Climate and Energy, of which Bloomberg is co-chair with Maroš Šefčovič. Bloomberg proudly gives speeches, such as the one he gave to the European Commission about the size of economy represented by the 15 states, 455 cities, 1,747 businesses and 325 higher learning institutions, which would be the third largest economy in the world by GDP (after the United States and China). The Pledge has already presented one annual report of "Nationally Determined Contribution" to Bonn at COP23 as per the Paris Agreement (EU Commission 2018).

Policy path not traveled

Stone (2005) acknowledges that even as urban regimes open some possibilities for policy success as they assemble power resources from disparate sources through collaboration and coalition, other policy alternatives are closed. Therefore, I think it is fruitful to look at what New York City has not done that is relevant to the environmental, climate change policy, and climate justice policy areas. While waste has been on the agenda, and some progress has been made, recycling, composting, and general garbage sorting remains dismal. Attempts were made to reduce plastic bags and ban Styrofoam, yet both persist. This can be compared with other jurisdictions nationally and internationally that are far ahead on these policies. Discussions and pilot projects have taken place around local environmental justice measures, but beyond some small park projects soon seemingly abandoned and the natural drainage sites no real progress has been made to more equitably share pollution sites, such as garbage transfer stations, between neighborhoods of the city. Finally, the UN has made efforts to create climate justice and sustainable development between developing and developed states, but cities are focused on mitigation, local adaptation, and maybe localized economic development, not foreign aid in the form of sustainability transfers of funds or technology.

Conclusions

Leadership proved vital for both priming and framing climate change as a New York City problem that city could have a role is solving. Bloomberg and De Blasio have both looked at New York City as a global policy leader, and sought to expand the scope of local act to have global ramifications. To those ends they deployed the rhetorical power of the mayors office as a means to bring global issues of climate change local. But that leadership was contingent on an electoral map and partisan population predisposed against anti-environmentalists and conservative Republicans, and then later against the neoliberal redevelopment Bloomberg represented after a dozen years in charge. Finally, limited resources of city and domination of an entrepreneurialism mode of policymaking means that the mayor's coalition continues to rely on extra-governmental actors and partnerships.

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