

THE ARCHITECT'S NEWSPAPER featured article

**NYC Releases Major Climate
Change Plan Aligned with
Paris Agreement**
Jackson Rollings

NYC RELEASES MAJOR CLIMATE CHANGE PLAN ALIGNED WITH PARIS AGREEMENT

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Authorship: Essay by Jackson Rollings, [The Architect's Newspaper](#) featured article.

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NYC Releases Major Climate Change Plan Aligned with Paris
Agreement

<https://urbannext.net/nyc-major-clime-plan/>

Last 3rd October, Mayor Bill de Blasio's administration released the 1.5°C plan – a [far-reaching new plan](#) intended to align New York City with the principles established during the 2016 Paris Climate Agreement. "In the Trump era, cities have to lead the way when it comes to fighting climate change," Mayor de Blasio stated in the plan's announcement.



ConEdison's electric power generating plant in Queens. (Flickr/Vincent Desjardins)

The 1.5°C plan – a name drawn from the Paris Agreement's goal of limiting global warming to a 1.5° Celsius increase – is focused on six areas of action: recycling, waste, buildings, energy,

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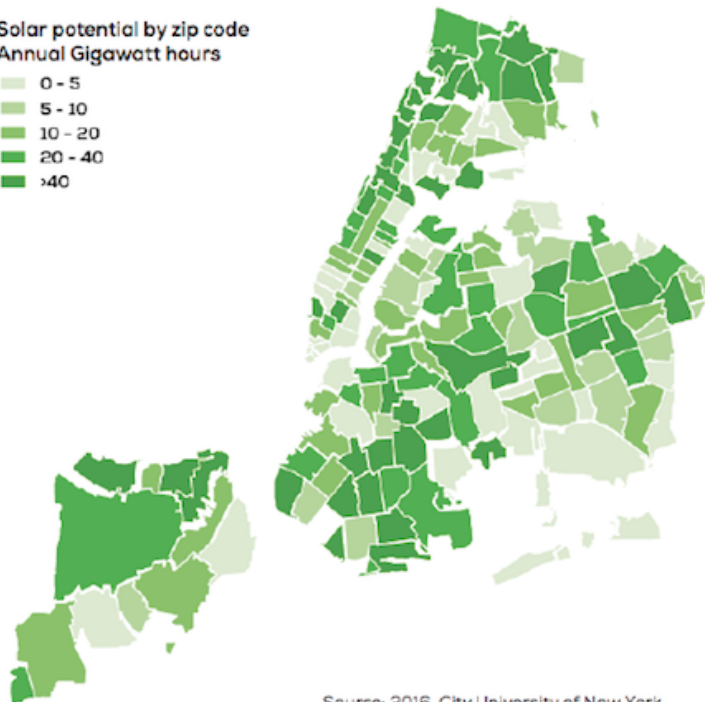
transportation, and carbon neutrality.

The plan marks the latest development in a series of commitments made by the city to reduce emissions. Last fall, the administration released the [80 X 50 Roadmap](#), which outlined a commitment to reduce the city's greenhouse gas emissions by 80 percent by 2050. [Earlier this summer](#), Mayor de Blasio signed an executive order opposing President Trump's intention to withdraw from the Paris Agreement and outlining the City's commitment to upholding it. [At the beginning of September](#), the de Blasio administration released [a plan](#) to update the aging infrastructure of existing buildings over 25,000 square feet by 2030, with strict penalties enacted afterward for those who don't comply.

DECENTRALIZING POWER THROUGH SOLAR AND STORAGE

Solar potential by zip code
Annual Gigawatt hours

- 0 - 5
- 5 - 10
- 10 - 20
- 20 - 40
- >40



Source: 2016, City University of New York

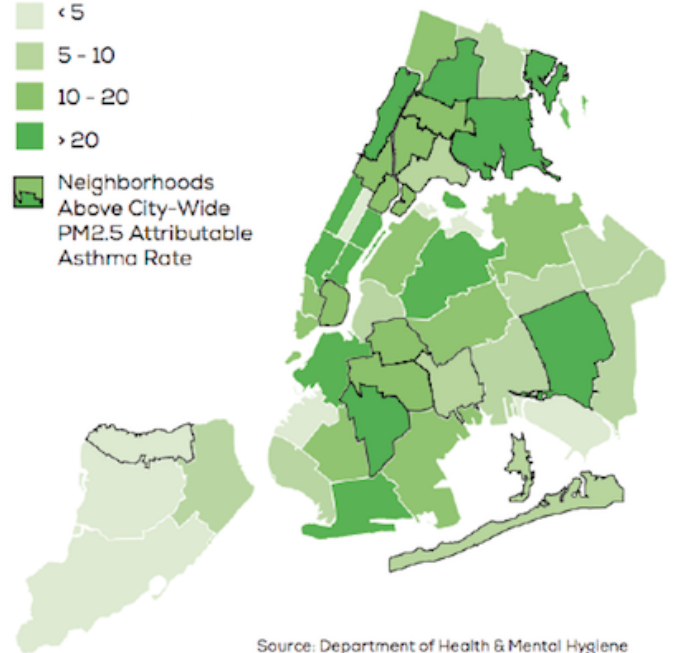
Distributed solar photovoltaic (PV) can be used to power energy storage systems. Solar PV and battery storage installations across the city will bolster resiliency and reliability by providing back-up power in the event of service outages.

IMPROVING AIR QUALITY BY REDUCING FOSSIL FUEL USE

DECREASE IN PM2.5 EMISSIONS (TONS/YEAR)

- < 5
- 5 - 10
- 10 - 20
- > 20

Neighborhoods
Above City-Wide
PM2.5 Attributable
Asthma Rate



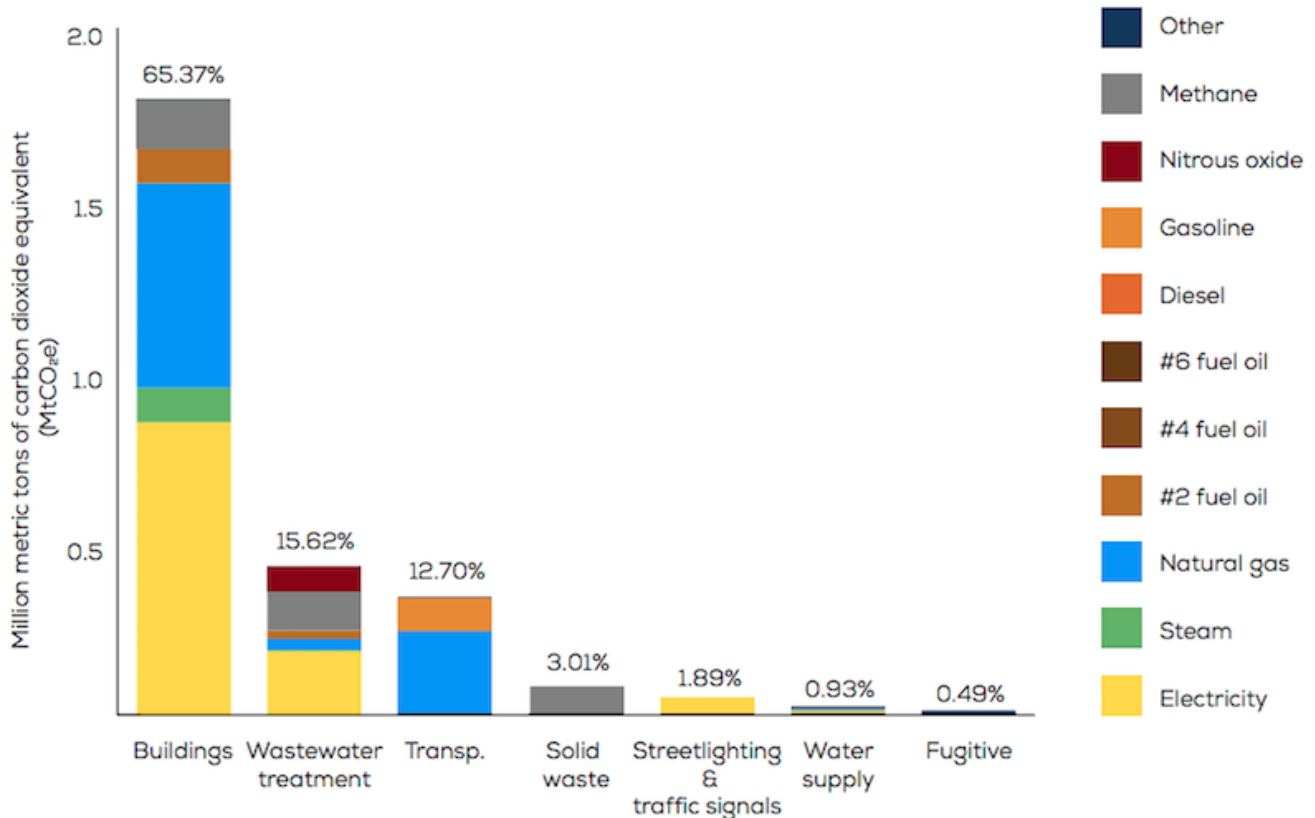
Source: Department of Health & Mental Hygiene

The proposed building energy performance mandate would have a significant impact on improving air quality in some of the most air-pollution-burdened neighborhoods in the city, specifically reducing fine particulate matter (PM2.5) which is known to contribute to asthma and other serious illnesses. By 2050, assuming energy performance mandates are fully implemented across large buildings, 100 premature deaths would be avoided each year.

Two targets of the new 1.5°C plan looking at the potential for solar energy across the boroughs, and decreasing the burning of fossil fuels. (Courtesy NYC Climate)

As the 1.5°C plan [states](#), the administration will apply emissions requirements to new construction and renovations across the five boroughs, and “adopt ‘stretch’ versions of the energy code in 2019 and 2022.” “Stretch” here refers to leniency toward the developers’ approaches – the City will reportedly provide metrics on energy efficiency but not stipulate *how* developers should meet those targets. As with earlier plans, the city will use [Property Assessed Clean Energy](#) (PACE) financing programs adapted for commercial and residential buildings, allowing utility upgrades to be paid off through property bills rather than out-of-pocket.

CITY GOVERNMENT ANNUAL GHG EMISSIONS BY SECTOR AND SOURCE



City government greenhouse gas emissions broken down by sector. (Courtesy NYC Climate)

Enacting 100 percent renewable energy in city government operations and buildings is another key aspect of the plan. The emissions of city agencies alone account for eight percent of the city's total greenhouse gas emissions from electric appliances, and 1.5°C aims to replace all energy infrastructure used by the city with renewable alternatives. Their timeline for this? "As soon as sufficient supply can be brought online." In the near future, the City has stated their intention to commence 50 new solar projects on public buildings sometime this fall, which would bring it a
























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quarter of the way towards its goal.

With regard to the transportation sector, the plan reiterates a proposal Mayor de Blasio made [in early August](#) to create a tax on millionaires generating up to \$800 million in funds to upgrade the NYC subway system. It also includes a proposal to expand infrastructure for bicycles (including protected lanes) and electric vehicles (including charging stations).

	ACTION	LEAD	GHG REDUCTIONS	CITY INVESTMENT	NON-CITY INVESTMENT
REDUCED AND MORE EFFICIENT CONSUMPTION	 Implement long-term energy intensity requirements in existing buildings	MOS			
	 Accelerate deep energy retrofits to achieve a 20% deeper reduction in energy consumption in City-owned buildings by 2025	DCAS			
	  Continue progress toward New York City Housing Authority's (NYCHA) climate commitments, including 20% reduction of energy use per square foot by 2025, installing 25 Megawatts (MW) of solar capacity by 2026, and 30% reduction of GHG emissions by 2027	NYCHA			
	 Advocate for more stringent efficiency standards for appliances and vehicles at the regional and national levels	MOS			not assessed
	 Advocate for incentives to support deep energy retrofits focusing on preserving affordability	MOS			not assessed
	 Implement advanced energy codes for new buildings in 2019, and achieve very low energy design targets in all new buildings and major renovations in subsequent code cycles	MOS & DOB			

NYC's climate actions to be completed by 2020, broken down by the potential for emissions reduction, funding streams, and the agencies responsible. (Courtesy NYC Climate)

Notably, the plan also outlines a goal of establishing a carbon neutrality protocol in partnership with other cities around the world including [C40](#) – a network of 90 international cities already committed to climate leadership – meant to establish common definitions for the reduction of global warming and greenhouse gas emissions.

In a public statement about the plan, New York Transportation Commissioner Polly Trottenberg stated that with New Yorkers' heavy use of mass transit, bicycles, and walking, "New York City produces the fewest greenhouse gas emissions per capita of any U.S. city." A statistic like this should be used as a baseline rather than a benchmark. As the 1.5°C plan evolves, hopefully the administration will release more specifics on the methodology they intend to apply to new developments to modernize energy use citywide, and clarify whether any penalties will be applied for those who don't comply. This morning's announcement has probably piqued the ears of a number of developers who may be wondering the same.

