

## **Community Energy Forum Handout**

# Responding to Climate Change • Conserving Energy in NYC Buildings Strengthening NYC and NY State Energy Policy

Live links to all resources in this document can be found at http://world.350.org/nyc/resources/

The NYC Panel on Climate Change includes scientists and legal, insurance, and risk management experts. Their latest report, <u>Building the Knowledge Base for Climate Resiliency</u>, contains <u>their predictions</u> for the direct challenges to city infrastructure.

**Increasing temperatures:** From 1900 to 2013, mean annual temperatures in NYC rose 3.4 degrees F. A further 4-5 degrees F increase is expected by 2050. By 2080, we'll have 6 heat waves per year. **Sea level rise:** NYC sea levels have risen a foot since 1900. By 2050, one to two feet more is expected. Sea levels could rise as much as six feet by 2100.

**Dangerous storms:** Precipitation will increase and become more erratic leading to more frequent and more intense storms, as well as more droughts and floods.

Many indirect impacts - on agriculture, public health, the economy – in the US and around the world – will affect us. Some scientists claim that scenarios from the UN's Intergovernmental Panel on Climate Change are too conservative. An article in New York Magazine illustrates other scenarios.

#### What can we do?

We must try to slow down and reverse climate change – while making ourselves and our communities more resilient to its impacts. The Paris Agreement, aimed at limiting global warming to under 2 degrees C (3.6 F), was a step in the right direction, even though its measures wouldn't have been sufficient. With the US federal government captured by fossil fuel corporate interests, and in full denial of reality, US cities and states are acting independently. NYC and the US Conference of Mayors have agreed to commit to the Paris goals. There is no time for complacency. Individual green lifestyle choices are necessary, but not enough. NYC plans are quite good, but also not sufficient. We can help NYC implement and strengthen its plans by plugging our neighbors into current programs to conserve energy and add renewable power in buildings. Expanding local efforts prepares for the next steps: organizing to massively upgrade City, State and National responses.

### NYC's Plans for Sustainability and Climate Change Response

*PlaNYC*, the City's first sustainability plan, was released in 2007 by Mayor Michael Bloomberg. In 2014, Mayor Bill di Blasio updated the plan as <u>OneNYC</u>, detailing hundreds of initiatives underway at City agencies, and adopting the <u>goals of the Paris Agreement</u>. <u>NYC's Roadmap to 80 x 50 report</u> of 2016 analyzed potential emission reductions. The City is on track to meet its 2030 target, but <u>still must work harder to get to 80%</u>.

#### Switch your personal electric use to wind and solar energy

350NYC makes this very easy. Electricity can be generated by a fossil fuel burning power plant, a nuclear power plant, hydropower, or a utility scale wind or solar facility. Only 2% of the electricity used by most NYC residents comes from renewable power: the other 98% is from other sources – fossil fuels and nuclear power.

If you rent or own an apartment, and pay your own utility bill, you can switch to a wind or solar energy provider. They will contact Con Ed, modify your account, and purchase the power you use each month from renewable sources. You will have personally divested from fossil fuels. Choosing among many suppliers of green electricity is confusing. 350NYC reviewed over 30 suppliers and decided to recommend and partner with Clean Choice Energy. If you sign up with them, 350NYC will receive a \$150 sign-on bonus. Visit our website to get started.

#### **Energy Efficiency for your Building**

About 70% of NYC's greenhouse gas emissions come from the energy used to heat, power, and cool buildings. Since over 90% of the buildings that exist today in NYC will still be here in 2050, nearly all existing buildings must be retrofitted to become more energy efficient.

**Transform your building. Explain to management what's in it for them.** One of the most impactful things you can do is to encourage your building's management to act. Tell your building's coop or condo board, or the property manager, that NYC's free program, the Retrofit Accelerator, will help them assess what energy conservation measures (ECMs) make sense for them.

ECMs will help owners and managers save money by reducing utility bills and operating costs, reducing labor and maintenance, and increasing occupant comfort. Even if they are not concerned about lessening climate impacts, they'll recognize that green practices are increasingly standard and have marketing benefits. Many ECMs will save enough from energy bills to <u>pay for themselves in less than five years</u>: LED lighting and sensors, sub-metering, ventilation, fuel switching, domestic hot water, HVAC controls, and distribution systems.

Most of these upgrades are voluntary, and many building managers do only what is required to comply with City laws. Managers will be more willing to consider them if they know that help is available – and that residents are asking.

**NYC Retrofit Accelerator:** Staff at the City's free advisory service streamlines the process of making energy efficiency improvements in buildings. They will work with management to assess the building's unique needs, make connections with qualified contractors, find cash incentives and financing, train building staff, and provide support even after project completion. <a href="Connect with them">Connect with them</a> at 212-656-9202 and. <a href="Contact 350NYC">Contact 350NYC</a> for a volunteer to assist you.

**Handbook for Multifamily Buildings:** Of NYC's one million buildings, nearly 100,000 are multifamily properties. A <u>handbook specifically for them</u> introduces the basics of energy efficiency, incentive programs, financing, relevant local laws, and technical training programs.

**Ready to Respond: Strategies for Multifamily Building Resilience:** 50 building resilience experts and staff from FEMA compiled <u>a manual detailing 19 practical strategies</u> for building owners to make their properties more resilient against the effects of extreme weather events.

#### **Solar Panels for your Roof?**

First, fix the areas where your building is wasting energy. Only install solar power after that. Otherwise, much of the additional electricity added by the solar project will be wasted!

Solar electric systems convert sunlight into electricity. They can reduce the amount of electricity a building has to buy from a utility. Excess electricity produced above building use can be credited to your building's utility bill through net metering. Financial and tax incentives can cover as much as 80% of the costs of solar panels. They can also be financed or leased, for little or no money upfront.

If you own a house, you can buy or lease solar yourself. If you live in a <u>coop or condo apartment</u> <u>building</u>, the building's board and management must agree to consider and then install a solar project. For large, tall buildings, the solar yield from relatively limited rooftop surface area will not cover as much of the building's common area electricity needs as in six story buildings with more roof space compared to building volume.

**Community Solar:** Solarize NYC brings together groups of potential solar customers, using group purchasing power to reduce prices 10-20% from individual pricing. A community can include a neighborhood, a group of buildings, or an association such as a labor union or property management firm. Solarize NYC will assist in choosing a solar installation company that offers competitive, transparent pricing.

The <u>Community Shared Solar model</u> allows building owners and renters in multifamily buildings without adequate solar access the opportunity to subscribe to portions of a large solar array located on- or off-site and managed by a third party. Each individual subscriber's share of production will appear as a credit on their utility bill, offsetting their monthly electricity charges. If the solar array generates more electricity than subscribers use, the excess generation credits will be distributed to individual subscribers.

#### To cope with climate change, we must transition to 100% renewable energy ASAP

The <u>Solutions Project</u> and scientists at Stanford University have come up with plans for all 50 US states and 138 countries to transition to 100% renewable energy. <u>The Climate Mobilization</u> is an organization that calls for a government-coordinated emergency effort to move from fossil fuels to renewable energy ASAP, modeled after the US mobilization at the outset of World War II. <u>350.org founder Bill McKibben</u> calls for politicians to commit to converting to 100% renewable energy while working to keep remaining fossil fuels in the ground.

#### Changing New York State's Climate and Energy Policy

The <u>Solutions Project's NY State</u> plan outlines how by 2030 electricity, transportation, heating/cooling, and industry energy infrastructure could be <u>run entirely from wind, water, and sunlight</u>, provided by: 10% onshore wind (4,020 5-megawatt / MW turbines), 40% offshore wind (12,700 5-MW turbines), 10% concentrated solar (387 100-MW plants), 10% solar-PV plants (828 50-MW plants), 6% residential rooftop PV (5 million 5-kW systems), 12% commercial rooftop PV (500,000 100-kW systems), with smaller numbers of geothermal, wave and hydroelectric systems.

#### New York State can switch to 100% clean renewable energy by 2030.

New York needs to commit to this goal, and can make it by investing in energy conservation, energy reduction, wind, solar and geothermal (e.g., heat pumps) not oil, gas, coal, fossil fuel infrastructure, or nuclear power. We must immediately halt investments in fossil fuels and related infrastructure. Legislation to require this has been introduced in the NY State Assembly and Senate. NYSERDA is working on a study on how fast NYS can move to 100% clean energy. GELF's <u>A Local Climate</u> Action Agenda explains what local governments can do.

NY State needs to strengthen its <u>plans to develop offshore wind power</u> by making a firm commitment to purchase 5,000 MW of wind power by 2025, and 10,000 MW by 2030. Unfortunately, Governor Cuomo is still giving more money (\$7.6 billion over 12 years) to bail out old upstate nuclear power plants than to renewable energy.

#### **NY State Climate and Community Protection Act**

While the NY State Energy Plan sets positive goals for 2030, they are only aspirational. NYS government agencies and officials are not legally required to put them into practice. The Climate and Community Protection Act (CCPA) is needed to fix this. The CCPA was drafted by climate law experts at the Sabin Center for Environmental Law at Columbia University, and is backed by NY Renews, a coalition of 140+ labor, community and environmental groups.

The CCPA would legally require NY State government to enforce its climate commitments, set new labor standards, provide worker protections for those in the renewable energy industries, and fund community resilience and green jobs training projects.

The New York State Assembly voted to write the CCPA into law in both in 2016 and 2017, but the bill keeps getting blocked in the Senate. The 8 members of the Independent Democratic Conference – Senators elected as Democrats who now vote with the Republicans – signed on as co-sponsors of the bill near the end of the 2017 session. Then, instead of pushing the Senate's Republican leadership to bring the bill up for an immediate vote, the IDC suddenly claimed profound misgivings about the bill. The IDC's last-minute endorsement of the CCPA enabled its members to claim they support climate action, while actually helping Senate Republicans to block it.

#### Urge Your NY State Senator and Senatorial Candidate to support the CCPA

Ask them both to cosponsor the Climate and Community Protection Act (S7971A).

<u>Senator Peralta</u> is a member of the IDC. This year he has signed up as a cosponsor of S7971A. Thank him for his support - ask him to advocate strongly for passage of the bill in the Senate this year, and ask his IDC colleagues to do the same. Contact him at 718-205-3881 and jperalta@nysenate.gov.

<u>Jessica Ramos</u> is running to challenge Sen. Peralta in the <u>Democratic primary this September 13</u>. Ask her to co-sponsor and advocate for S7971A if elected. Contact her through her website, <u>www.ramosforstatesenate.com/</u>.

350NYC neither endorses nor opposes candidates. As part of our educational mission we encourage you to contact both candidates about climate protection and this bill.