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Upper West Side Recycling

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UWSR Eco Letter – Sample Commentaries

The following two Commentaries originally appeared in 2015.

- The first, on [Electronic Waste](#), was a timely update to our readers with practical information regarding a new State law that required the recycling of computers and other electronic waste from residential buildings.
- The second, on [Climate Change and Global Warming](#), addresses the broader ramifications of our energy use and also how it can affect our city.

Together they represent both the local and global aspects of environmental issues that are so pressing, and are also important reminders that when we act locally we can truly make a difference globally.

To have complete access to our Archives and to receive all future Commentaries, [subscribe now to our UWSR Eco Letter](#).

Following is a partial list of other Commentary topics available when you [subscribe to the UWSR Eco Letter](#):

- DSNY Recycling Programs
- Energy Conservation
- Lower East Side Ecology
- Organic Waste
- Raising Food in New York City
- Recycling in Schools
- Recycling Updates
- Solar Energy Utilization
- Textile Recycling
- The Recycling Process
- Urban Greening & Neighborhood Beautification
- Waste Reduction / Zero Waste
- Water Quality

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“Electronic Waste
Recycling”*](#)

[*Click here to read about
“Climate Change and
Global Warming”*](#)



UWSR Eco Letter

January/February 2015

COMMENTARY: ELECTRONIC WASTE

Although this is a relatively quiet time for environmental activities, we want to bring your attention to one very important change that is effective January 1, 2015: According to NY State Law, **all computers and other electronic waste from all NYC residential buildings must now be recycled**. You are now no longer permitted to throw E-Waste into the trash. To implement this law, the NYC Sanitation Department (DSNY) will no longer collect electronics left at the curb.

There is a four-month grace period before fines will be levied, but it's important to start the process now, particularly if your building is eligible for DSNY E-Waste pickup (it must have 10 or more units; see below for details).

How Can You Recycle E-Waste in Your Own Building?

This depends on the size of the building:

(1) *Apartment buildings with 10 or more residential units* are eligible for a free DSNY pickup. The first step in this process is to schedule a site visit. Check with your building management or super to confirm who will initiate the process. More information can be found and site visits scheduled via the DSNY's website; click on <http://www.nyc.gov/html/nycwasteless/html/contact/enrollmentform.shtml>.

There is a waiting time of several weeks before your building will receive the site visit, so it's prudent to begin as soon as possible. Materials for collection can be stored in a closet or in a container that DSNY will supply. DSNY will not place the containers in outside areas unless they are covered and secure.

Another organization that picks up E-Waste is the The Fourth Bin, but they charge a small fee to do this (tel: 646-747-5985; www.4thbin.com; ecyclenow@4thbin.com).

(2) *Apartment buildings with fewer than 10 residential units*, including single-family houses, are a bit more difficult:

- Your building might be eligible for a pickup from The Fourth Bin; contact them directly (tel: 646-747-5985; www.4thbin.com; ecyclenow@4thbin.com).
- You can use one of the options listed below for recycling electronics outside your building.
- You can work with block associations, churches or other local community groups in order to amass a sufficient quantity of E-Waste to qualify for a pick-up. UWSR will be investigating this during the spring of 2015.

Options for Recycling Electronics Outside your Building

- **Electronics Recycling Events:**

As most of you already know, Lower East Side Ecology operates community E-Waste collection events throughout NYC. These are always listed in our *Eco Letter*, or you can contact them directly (tel: 212-477-4022; <http://lesecolgycenter.org/>).

- Retail Drop-Off Programs:

You can drop off used electronics (no purchase necessary) at Goodwill, Salvation Army, Best Buy, and Staples (no TVs), or at the Lower East Side Ecology Warehouse in Brooklyn. See our [Hard-to-Recycle List](#) or the Google map of [NYC electronics drop-off locations](#) <https://www.google.com/maps/search/nyc+electronics+drop-off+locations/@40.7056258,-73.97968,10z/data=!3m1!4b1>.

- Mail-Back Programs:

Many manufacturers of electronic goods offer these programs. Check your specific brand's website for details.

- Donate or Sell Electronics:

If they still work, you can donate or sell electronic goods. See our [Hard-to-Recycle List](#) or click on www.nyc.gov/stuffexchange for options in your neighborhood.

Why is E-Waste Recycling Important?

Electronic waste comprises a relatively small percentage of NYC's waste stream, but it's the fastest growing part; all this new stuff is inexorably clogging landfills around the country. These materials do not biodegrade quickly; many of them will still be in the ground hundreds of years from now. Perhaps most importantly, electronic devices contain small amounts of heavy metals, some of them quite toxic (e.g., lead, cadmium). Small quantities added bit by bit over time produce a net effect that can be cumulatively destructive to our soil and water.

Please obey the new NY State law to the best of your ability. For more information on its specifics see <http://www.dec.ny.gov/>



UWSR Eco Letter
July/August 2015

To receive the UWSR Eco Letter, which includes commentaries about recycling and other environmental issues, as well as listings of local environmental events, please email us at info@uwsr.org.

COMMENTARY:
CLIMATE CHANGE AND GLOBAL WARMING

1. Introduction

Climate change is like the elephant in the room that many people avoid looking at or, if they do, feel it's so large that little can be done about it. But that elephant is real - regardless of whether some extremists vociferously deny its existence - and it will have profound effects on our planet if we continue on our current course of action, particularly in regard to the burning of fossil fuels. The Earth's climate has been relatively stable for the past 12,000 years; this stability has been

crucial for the development of our modern civilization and life as we know it. Our stability is now threatened, and the faster the climate changes, the harder it could be to adapt to the new conditions.

At the root of the current global warming trend is the "greenhouse effect" - warming that results when the Earth's atmosphere traps heat radiating back out from the Earth's surface toward space. The heat-trapping nature of carbon dioxide, methane and other gases was demonstrated long ago in the mid-19th century. More recently, ice cores drawn from Greenland, Antarctica, and tropical mountain glaciers confirm that the Earth's climate is responding to changes in greenhouse gas levels. Over the last century the burning of fossil fuels like coal and oil has resulted in an increase in atmospheric greenhouse gases such as carbon dioxide (CO₂) and methane (CH₄). For example, measured CO₂ levels have risen from about 280 parts per million (ppm) in pre-industrial times to about 400 ppm now. To underscore the significance of this rise it is important to note that scientific evidence indicates that CO₂ has not been above about 300 ppm at any other time in the past 600,000 years.

There is now no doubt that increased levels of greenhouse gases cause the Earth to warm in response, and additional effects seem likely in the future:

- On average, the Earth will become warmer, even if some regions do not. Since 1880 the mean global temperature has increased by 1.4 degrees Fahrenheit. This might not seem like much, but the rise in temperature is already having a number of adverse effects, some of which might become irreversible.
- A greater greenhouse effect will warm the oceans and melt glaciers and ice sheets, thereby increasing sea levels. Ocean water will also expand as it warms, contributing further to sea level rise.
- Warmer conditions may lead to increased evaporation and subsequently more precipitation overall. Thus, it is likely there will be more extreme precipitation events. However, individual regions will vary, some becoming wetter and others drier.
- While some crops and other plants may respond favorably to increased atmospheric CO₂, plants in other areas will be adversely affected. Of particular concern in the United States are the large food-producing regions in the Southwest and in California, which climate models predict will become hotter and drier.

2. Evidence for Climate Change

- Most of the above-mentioned global warming has occurred since the 1970s, during a period of greatly increased global usage of fossil fuels. The 20 warmest years in recorded history have all occurred since 1981, with the 10 warmest taking place within just the last 12 years.
- Global sea level rose about 17 centimeters (6.7 inches) during the past century. This rate, however, has nearly doubled in only the last decade.
- The Greenland and Antarctic ice sheets have decreased in mass, recently losing about 15 to 20 cubic miles of ice per year. The future rate of this melting is uncertain, but there is significant evidence that it is happening at a faster rate than was previously predicted.
- Glaciers are also disappearing at an alarming rate. The glaciers and snowpack in the Himalayas are of particular concern, since they, along with the annual monsoons, supply almost all of the water in South-Central and Southeast Asia, home to about one-third of the world's population. The high Himalayas receive relatively little precipitation, meaning that the ice will regenerate at a slow rate.

Ninety-seven percent of climate scientists now agree that climate-warming trends over the past century are very likely the result of human activities. It seems useful to apply a benefit/loss analysis to this situation. Who benefits most from continuing to burn fossil fuels at the current rate, instead of accelerating a transition to renewable energy and energy conservation? Primarily the tycoons of the oil and coal industries. Who loses? All of us, particularly the billions of people living in low-lying coastal areas or those dependent on spring snow or glacial run-off for much of their water supply. And we will all suffer to a greater or lesser degree because of the probable effects on agriculture.

3. How Climate Change Will Likely Affect NYC

While climate change is a global issue, it is felt on a local scale. Heat waves, heavy downpours, and sea level rise pose growing challenges to many aspects of life in the Northeast. Infrastructure, agriculture, fisheries, and ecosystems will be increasingly compromised.

The climate of the New York City metropolitan region is changing as well - average annual temperatures are hotter, heavy downpours are increasingly frequent, and the sea is rising. For example, mean annual air temperature has increased at a rate of 0.3°F per decade (a total of 3.4°F) from 1900 to 2013 in Central Park, although the trend has varied substantially over shorter periods. Mean annual precipitation has increased at a rate of approximately 0.8 inches per decade (a total of 8 inches) from 1900 to 2013 in Central Park. Year-to-year (and multi-year) variability of precipitation has also become more pronounced, especially since the 1970s.

These trends are projected to continue and even worsen in the coming decades, increasing the risks for the people, economy, and infrastructure of New York City:

- Current mean annual temperatures are projected to increase by 4.1-5.7 °F in the 2050s; and by 5.3-8.8°F in the 2080s. Heat waves are also very likely to increase in intensity.
- Total annual precipitation will likely increase.
- The frequency of extreme precipitation events is also projected to increase.

A vivid example of an extreme weather event in our area was Hurricane Sandy in October 2012. In the last 100 years no hurricane-strength storm has come into the NYC area on a track from east to west. Although it cannot be said with certainty that global warming was a cause of Sandy, it may have created circumstances where events like this are more likely to occur. At the very least, Sandy was a dramatic reminder of the extreme vulnerability of populations living in coastal and low-lying areas.

4. Solutions (Mitigation or Adaptation)

Because we have already experienced some degree of climate change, responding to future climate change involves a two-pronged approach, utilizing both *mitigation* and *adaptation*:

The first, and most desirable, is mitigation, which consists of reducing the amount of heat-trapping greenhouse gases streaming into the atmosphere, either by limiting the production of these gases at their sources (primarily the burning of fossil fuels to generate electricity or produce heat; or the use of gasoline for transportation). We can also mitigate climate change by accelerating our usage of renewable energy sources and energy conservation measures. A third course of action is to facilitate greenhouse gas absorption by "sinks" that accumulate and store these gases (such as the oceans, forests and soil). Mitigation also includes schemes such as

carbon sequestration, which some regard as a primarily stop-gap measure and at least a partial capitulation to the fossil fuel industry

Adaptation involves adjusting to actual or expected future climate. The goal is to reduce our vulnerability to the harmful effects of climate change (like sea-level encroachment, more intense extreme weather events or food insecurity) rather than trying to reduce the emissions of the greenhouse gases themselves.

Many states and cities are beginning to incorporate climate change issues into their planning. In response to these climate challenges, New York City itself is developing a broad range of climate resiliency policies and programs as well as the knowledge base to support them.

5. What You Can Do to Help

Each of us, by making small changes in our daily lives, can have an impact. Taken collectively, these small changes can have a significant difference. Much of what you can do revolves around your personal consumption of energy from fossil fuels. Steps you can take include:

- Energy conservation options include the following: Turn off lights in empty rooms; buy energy-efficient appliances and light bulbs (e.g., LEDs); minimize the use of your air conditioner (don't leave it on when you're not home and use fans instead when possible); don't hold your refrigerator door open for longer than necessary; keep your thermostat down during the winter; and walk, use bikes or mass transit as much as you can. More information is available at www.coned.com/energyefficiency.
- Use renewable energy such as solar, wind or hydropower. You can opt to use electricity produced by wind power or hydroelectricity via suppliers such as Con Ed Solutions (www.conedsolutions.com, 914-286-7000) or Green Mountain Power (www.greenmountainenergy.com, 855-991-9416). For a complete list of energy suppliers in New York State see www.chooseenergy.com/NewYork. If possible, have photovoltaic panels or solar water heating installed in your building (contact Urban Grown Energy, www.ugei.com).
- You can also help reduce atmospheric CO₂ and CH₄ by planting trees or gardens (which absorb CO₂), installing a green roof, or eating less beef (cows are a major methane source)

Additional Sources of Information

- National Research Council (2006). *Surface Temperature Reconstructions for the Last 2,000 Years*. National Academy Press, Washington, DC.
- Rosenzweig et al. (2015). Building the Knowledge Base for Climate Resiliency: New York City Panel on Climate Change 2015 Report. *Annals of the New York Academy of Sciences*, Jan 2015, New York, Wiley, 150 pp. Available online at <http://onlinelibrary.wiley.com/doi/10.1111/nyas.2015.1336.issue-1/issuetoc>.
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