

The Village of Briarcliff Manor

Sustainability Advisory Committee

- and -

Environmental Advisory Council

Fall 2023 Newsletter

Welcome to our fall newsletter!



You feel the anticipation of fall and the holiday season when you see the leaves changing color and there is a crispness in the air! Why not make an autumn resolution to incorporate more sustainable practices in your everyday lives which will be impactful at this time of year?

Maybe this fall is the time to transition to an electric leaf blower, or to mulch your leaves in place. Maybe this holiday season is the time to transition to using recycled materials for your gift wrap, using local, sustainably farmed produce for your holiday feast, or switching to LED holiday lights. Remember that your smallest actions can add up to reduce your environmental impact.

We wish you all a safe, happy, and sustainable holiday season!

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Leave Leaves Alone

“Leaves are not litter!” Perhaps you’ve heard this refrain from gardeners, conservation groups, or others concerned with environmental sustainability. Every fall, be it out of cultural habit or assumed necessity, homeowners across the Northeast use gas-powered blowers to eliminate fallen leaves from their landscapes. But changing this common practice and choosing to “leave the leaves” promises a variety of benefits to your local ecosystem.

Deciduous trees, like maples, oaks, and hickories, lose their leaves each autumn as an adaptation to survive the coming winter. Leaves release water from their surfaces into the air through evapotranspiration. In winter, freezing temperatures make water inaccessible to trees, so they drop their leaves to protect themselves against drought -- otherwise, they would lose all their water through their leaves. In nature, fallen leaves decompose and release their nutrients back into the ecosystem. “Leaf litter” is different from what we commonly think of as “litter” -- improperly discarded trash -- and instead refers to the layer of partially-decomposed leaves that sits on top of forest soils. This leaf litter layer critically protects soils and all sorts of invertebrates over the winter.



Fallen leaves also provide important ecosystem services in our residential landscapes. By mulching fallen leaves into lawns and allowing them to decompose, we are naturally returning nutrients to our soil, reducing the need to supplement with synthetic fertilizers that wash off and pollute our waterways. Also, fallen leaves are critical habitat for overwintering insect pollinators like butterflies, moths, and fireflies. Their larvae bury in the leaf litter, emerging in the spring to continue their life cycles. Blowing leaves can be catastrophic to these important insect larvae, and when we pile up our leaves on the curb, we are throwing away all this wonderful biodiversity.

Also, gas-powered leaf blowers are environmentally harmful. They use fossil fuels, contribute to carbon emissions, cause chemical and particulate air pollution, and are a noise nuisance. They are also hugely inefficient; how often have you observed someone blowing a yard full of leaves into a pile in the street, only to see the wind blow them back?

This fall, consider “leaving the leaves” in some way in your own yard. This can include:

- Leaving fallen leaves alone in woodland areas and around shrubs
- Raking leaves from lawn areas into woodland areas, yard areas left “wild,” or perennial beds for mulch/winter insulation (and save money on mulch in the spring!)
- Piling up leaves and composting them -- a simple chickenwire fence can be constructed in a ring around a leaf pile to keep it in place (this compost is a great addition to spring gardens)
- Mowing over leaves in lawn areas to cut them into smaller pieces, which quickens their decomposition (a mulching blade can be put on a mower to make this even more efficient)

Visit leaveleavesalone.org for more information!

Briarcliff Middle School Litter-less Lunch Program

Hannah Tashiro (BHS 9th Grade)

When going back to school, many students can't wait for the glorious half-way point of the day, lunch. However, to the environment lunch doesn't bring such glorious aspects. An average-sized elementary school in the US produces nine tons of lunch waste a year, which is mostly plastic! With this in mind, Briarcliff Middle school's version of "litter-less lunch" was born.

Started by Mrs. Dubin, an art teacher at both BMS and BHS, litter-less lunch was a concept used to help lessen the school's environmental impact. Starting last spring at BMS, once a month students were asked to bring in low-waste lunches, with either reusable or recyclable packaging. This was complemented with help from our school's cafeteria, which limited the amount of single use plastic bottles being sold that day.

After lunch, students were asked to sort their trash into four receptacles at the front of the cafeteria. One each for paper, plastic, trash, and juice containers. The paper and plastic could then be easily recycled. The trash, greatly reduced due to a more mindful, environmentally-friendly approach to packing lunch, thrown out, and the juice containers reused as part of school art projects.

The results? On the first day litter-less lunch was implemented, the amount of trash was so small in comparison to a typical school day, it was glaringly obvious to all that we throw out a LOT of material that should be recycled.

Based on the visible impact, it is clear that the initiative helped reduce BMS's lunch waste, lessening the school's environmental impact. We cannot wait to spread this to all three schools in Briarcliff in the new year!



Image credit: www.epa.gov

Clean Energy Spotlight: Geothermal Heat Pumps

If you are looking to replace a furnace or your air conditioning system, **geothermal heating and cooling technologies** are the latest in clean energy options. Geothermal heat pumps transfer heat stored in the earth into your building during the winter, and transfer it back into the ground during the summer to keep your home cool. Geothermal systems offer a domestic source of reliable, renewable energy, regardless of weather. Briarcliff Manor residents had filed nine applications for geothermal installations through 2022; three of those projects have already been completed.

How does it work? The system uses a series of connected pipes buried underground near the building. The pipes circulate a fluid that absorbs or deposits heat to the surrounding soil, depending on whether the outside air is colder or warmer than the soil. When the air is colder than the ground, the system removes heat from the fluid, concentrates it and transfers it to the building. When the air is warmer than the ground, the system removes heat from the building and deposits it underground. Conventional ductwork distributes the heated or cooled air from the system throughout the building.

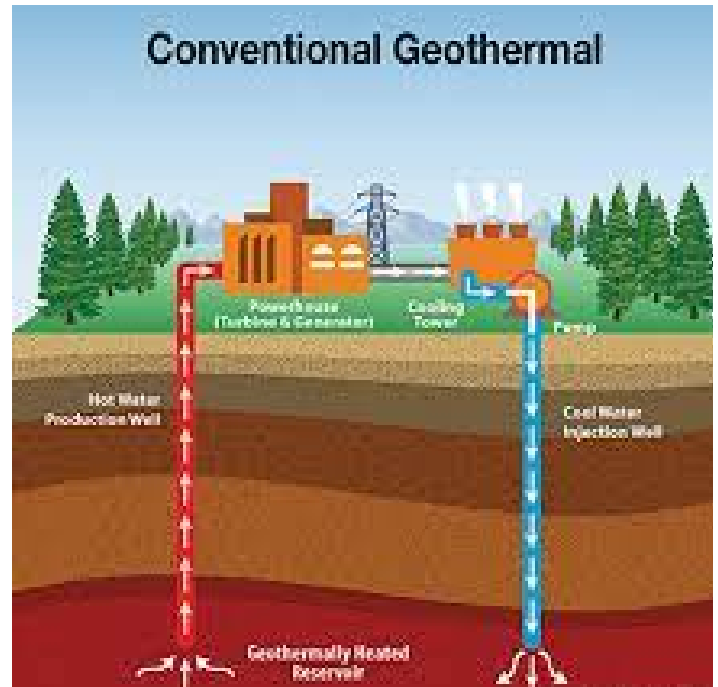


Image Credit: Greenfireenergy.com

If your boiler/furnace or central AC system is more than 15 years old, ground source heat pump retrofits are a possibility. Use **NYSERDA's Geopossibilities** tool to plug in your address and see if a geothermal system could be an option for your home.

Geothermal tax credits: All residential geothermal heat pump installations are eligible for a 30% **federal tax credit** effective January 1, 2023 through 2032. The heat pump must meet the ENERGY STAR requirements, and must be installed in your primary residence that you own. New York homeowners are also eligible for a 25% **State tax credit** upto \$5000, in addition to **rebates from ConEd**.

For more information on installer partners, and success stories, check out www.sustainablewestchester.org

Geothermal Heat Pumps

Case Study with the Van Schoyck Family (Briarcliff Manor)

B-SAC: Why did you decide to install geothermal?

DVS: We moved into our house in 2021 and knew the property would need some upgrades. The house was set up on a hydro-air system so we had existing duct work on an oil fired burner and traditional central air. Our boiler was on borrowed time as were our A/C condensers, so we needed to make some adjustments to our system and a geothermal retrofit worked fairly well with our existing set up.

In looking at our potential options, we didn't have that many great solutions that were friendly on the environment and made sense for us long term. We were not going to invest any more in oil and given the ConEd moratorium on new gas load that wasn't an option either. What was appealing about geothermal were the benefits to the environment, harnessing the power of the earth and being able to get off fossil fuels, at least directly at our property.

Additionally, the tax incentives for geothermal solutions help make the cost of things make a lot of sense here in Westchester. While geothermal systems are certainly expensive and complicated to install, once installation takes place they don't require heavy maintenance and have long term savings, which was something we liked as well. Our savings will come from being able to utilize the earth's consistent temperature as an energy supply.

We signed our contract in July 2022, went through a system design phase (2022), drilling phase (March 2023), trenching phase (April 2023) and we are waiting on the final hook up, scheduled to be completed in fall 2023.



Drilling



Bore holes in backyard

Geothermal Heat Pumps:

Case Study with the Van Schoyck Family (Briarcliff Manor)

B-SAC: Please describe the installation process.

DVS: We chose Dandelion Geothermal for our solution. The process starts with a consultation. The team photographs the home and builds a 3d model that is used for the final design. After we decided on the size of the system, we waited about 7 months for the drill to be available. The initial boring of our holes in our backyard took about 3 days. Then we waited to schedule a team to trench from the lines deep in the backyard to our foundation and into the house.



Trenching from boreholes to the foundation

The trenching process was quick and took about 1.5 days. The next phase is installing the new air handlers, heat pump and equipment on the interior of the house. Because our boiler supplies both our heat and hot water, we are also at the same time replacing our hot water heater to get that off of oil as well. Along the design phase, we hit a snag when the system design suddenly was going to cost us about double the original amount we had planned, due to a change in CONED's incentives. We were able to work through a solution that still made the solution viable to us.



Trenches covered; backyard back to grade

The only hiccup we have had in the process has been getting our electrical service upgrade. We needed 400AMP service to handle the new load of the geothermal system. Dandelion said they would offer the electrical upgrade, but only in a specific place that was not convenient to us, so we opted to have our own electrician perform the upgrade. This process took more time and CONED has had some supply issues with transformers, which has delayed our interior installation.

B-SAC: How much do you expect to save?

DVS: Since our system is yet to be completed, we have yet to see any savings. The newly designed system is about 4x more efficient than our set up now. We will end up using more electricity in the winter than we do right now, but we won't have the cost of oil. That cost of electricity however looks like it will be about 25% of the our oil bill. The savings take place once the system turns on, but are most directly felt during the winter months because of the drastic decrease in not having an oil bill.

Composting 101

Want to cut down on food waste and benefit the environment? Start composting! Composting is the natural process of recycling organic matter, such as leaves and food scraps, into a valuable fertilizer that can enrich soil and plants. Composting is ecologically beneficial because food waste, when dumped in a landfill, produces methane, a potent greenhouse gas. Composting sharply reduces those emissions. Anything that grows decomposes eventually. Composting just speeds up the process by providing an ideal environment for bacteria, fungi, and other decomposing organisms to do their work.



Image credit: Botanical paperworks.com



PLANT-BASED food scraps can be composted at home

Enrich your garden soil, and save money, by producing your own compost. You will also be able to cut down on watering and reduce the potential for erosion because compost helps the soil retain nutrients. Perhaps most importantly, compost can be used in your garden in place of chemical fertilizers and pesticides to ensure a healthy yard. Composting at home is easy to do, with minimal effort and equipment required. You can build a pile or bin yourself or purchase one. Fruit and vegetable scraps, grass clippings, yard trimmings, coffee grounds, eggshells, and leaves can all be composted right in your backyard.



Image credit: Britannica.com



Composting 101

Briarcliff residents in the Town of Ossining can collect ALL food scraps and drop them off at **Ossining's Cedar Lane Park** seven days a week, or at the **Ossining Farmer's Market** Saturdays from 9:30 to 11:30 am, for commercial composting.

The main difference between home composting and commercial composting is that a backyard composter is limited to certain foods, while a commercial composting facility can accept any food. **Meat, fish, dairy, bones, shells, pasta, bread, rice, fats and oils can all be composted at a commercial facility.**

All food scraps collected in Ossining are now composted locally at Sustainable Materials Management, Inc. in Cortlandt Manor, which turns the food scraps into compost for gardens, landscaping, and agricultural use.

Participation in the program is free. You can use any bin to collect your food scraps, or purchase a starter kit from the Town of Ossining.



For a comprehensive guide to composting at home, go to www.dec.ny.gov

For more information on drop-off composting, go to <https://ossiningcomposts.org/>
You can also check the website for compost give-back days!

Clean Energy Upgrades Can Increase The Value of Your Home

by
Susan Strawgate Code (Houlihan Lawrence, Briarcliff Manor)

In 2022, the average age of today's homebuyer was 36 years old, according to the National Association of Realtors.

This generation of homebuyers was raised in the age of Earth Day as a holiday in which they participated in cleaning up their neighborhood, planting trees and creating sustainability organizations in their high schools, colleges and communities. They grew up hearing about the effects of climate change, and debates about fossil fuels. Hybrid and electric cars became standard in their lifetime. And wind, solar and geothermal energy alternatives changed from "future possibilities" to current reality.

So it's no wonder that today's generation of homebuyers, not only see the benefits of homes with eco-friendly, clean energy and sustainable features, they often seek them out, and prefer them. In my 31 year career as a realtor, I have seen the transition in buyer attitudes about solar panels. What once was considered a hefty expense and possible eyesore, is now seen as an investment in the future, and an actual savings in energy expenses.

In 12 states, the federal government will actually subsidize the cost of installing solar panels for homebuyers with limited means. Over the years, the state and federal governments have sometimes offered substantial tax savings to homeowners who install energy saving products in their homes, from solar panels to energy-efficient windows, boilers, and insulation.

All you have to do is read the remarks on current real estate listings to notice an increase in marketing of homes with energy-efficient and sustainable features, such as bamboo floors, LED lights, solar panels and electric car charging stations in the garage. In my experience, today's generation of buyers not only asks about, but they seek out, eco-friendly features, and are often willing to pay more for a house that offers them.

A recent article on 8/3/23 by Bob O'Connor in The Wall Street Journal began:

"Triple-Digit Heat, but No Electric Bill? For Passive Homeowners, 'It's Hard to Go Back'

Three side-by-side houses in Boston are designed to offer clean inside air, reduced emissions and little to no energy costs" The article goes on to discuss:

"It was the open, modern style of the house in West Roxbury, Mass., that first got one couple's attention: a box made of clear-finished white cedar siding that seemed to float above a dark metal base, with large windows, panels of wood slats and high ceilings.

But the main reason they paid \$1.4 million for the 2,500-square-foot home was the technology. “This winter it got freezing, and we were in our shorts,” says Amod Athavale, 37, who moved into the newly built house with his wife, Manasi Datar, 36, in July 2022. This summer, the house has remained at 72 to 75 degrees with only a few hours of air conditioning each day, despite the triple-digit heat that hit the city. In fact, their electricity bill currently has a negative balance of about \$1,000, meaning the electric company owes them, Athavale says.”

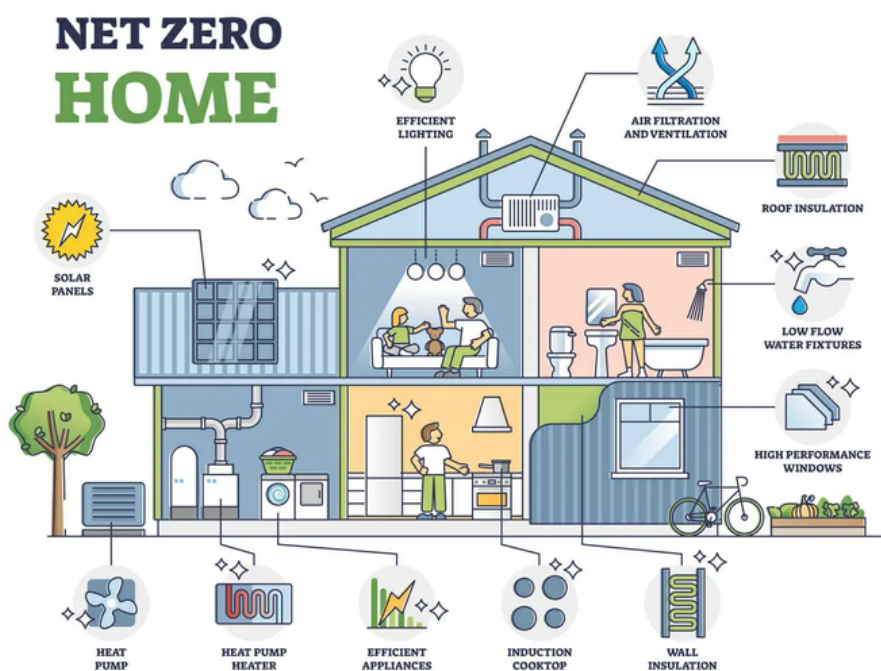


Image credit: Think Architecture

With rising energy costs, it's no wonder that homes that offer energy efficient features are attractive to today's home buyers. So if you are a homeowner considering making clean energy upgrades to your home, whether it's a change to your heating or cooling system, insulation, flooring or lighting, keep in mind that eco-friendly, energy changes may not only benefit you now, but in the future sale of your home as well.

Native Plant Spotlight

Woody Plant:

Hamamelis virginiana (Common witch-hazel)



Image credit: Mt. Cuba Center

Witch hazel is a small tree or multi-stemmed large shrub that is native to woodlands throughout the eastern half of the US. While Asiatic hybrids bloom in the spring, the native variety is unusual in that it is a fall-blooming woody plant, with delicate yellow flowers. The wavy leaves also turn a golden yellow in the fall. It grows best in moist, well-drained soils in sun to part shade. An extract from its leaves and bark has medicinal and cosmetic properties, and is often used as a facial toner.

Herbaceous Plant:

Solidago canadensis (Canada goldenrod)

Goldenrods are native wildflowers that have immense value to pollinators. As fall bloomers, they provide critical nectar resources to bees and butterflies. Canada goldenrod is a common but beautiful native goldenrod with a showy display of bright yellow flowers. It prefers sun to part shade and dry to moist soils, and is a perfect addition to a lawn-replacing wildflower garden. It is often mistakenly blamed for the hay fever allergies caused by the co-blooming plant known as ragweed, which has less conspicuous flowers.



Image credit: Lady Bird Johnson
Wildflower Center

B-SAC Summer Recap

Community Day (September 9, 2023)



Thunderstorms and rain did not stop Community Day activities! The kids were excited to figure out how to sort recyclables, food scraps and trash into the correct containers!



Trustee Mallett visited our booth to see how the sustainability action was going!



Huge shout-out to our super enthusiastic BHS volunteers!



We were very happy to chat with New York State representative Dana Levenberg about clean energy and all things sustainability-related!

Upcoming Events

Halloween Costume Swap

Drop off your gently used Halloween costumes at the Briarcliff Manor Recreation Department any day until **October 10th**. Come and pick up a costume on **Saturday, October 14th at Law Park Pavilion between 12-2pm!**

Movie night

Join us on **October 20th at 7 pm** to watch **The Clean Bin Project at the Briarcliff Manor Public Library**. This is a multi-award winning light-hearted entertainer with a serious theme where partners Jen and Grant compete to see who can produce the least amount of garbage. The movie is sponsored by Briarcliff Sustainability Advisory Committee and Briarcliff Public Library. Stay tuned for additional information!

Join us at our meetings to learn what we are working on, and to see how you can contribute to making Briarcliff cleaner and greener!

SAC meetings: First Thursday of every month. 7:00 pm

EAC meetings: Fourth Thursday of every month. 7:00 pm
Village Hall, Court Room

For more information, email us at
SAC@briarcliffmanor.gov or EAC@briarcliffmanor.gov

Visit us at

Sustainability-advisory-committee and
Environmental-advisory-council

SAC

Padma Sridhar, PhD (Chair)
Stacey Winnick
Seth Leitman
Jennifer Sendek
Melissa Rinzler

EAC

Amy Karpati, PhD (Chair)
Brooke Beebe
Ernie DeMarie
Steven Kavee
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