



May/June 2024 NEWSLETTER

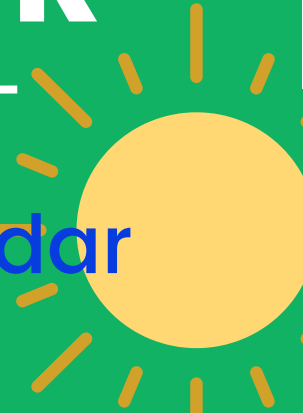
SUSTAINABILITY FAIR SIMSBURY PUBLIC LIBRARY



SATURDAY, MAY 4
10AM - 2PM



Calendar



Container Gardening with Native Plants
May 9, 7 p.m., Simsbury United Methodist Church
Learn how to create beautiful containers that will attract pollinators! Presented by Simsbury Pollinator Pathway, Gardeners of Simsbury, and Pollinator Partners

E-Bike Workshop
May 9, 6:30 - 8 p.m., Simsbury Public Library
Walter Rochefort of the Bicycle Cellar will discuss electric bikes. Co-sponsored by the SPL and the Simsbury Bicycle Pedestrian Advisory Committee

World Fish Migration Day
May 21, 3 p.m. - 6 p.m. Northwest Park Nature Center Windsor
Join FRWA in celebrating free-flowing rivers and fish migration with a walk, social, and documentary. More info and registration: <https://nature.ly/4cyt4rM>.

Simsbury Grange Agricultural Fair
June 8, 10 a.m. - 2 p.m.
236 Farms Village Road
Celebrate Simsbury's agriculture! Learn about our local farmers and all that's great and green!

Simsbury Land Trust Volunteer Training
June 8, 8 a.m. - 10 a.m., The Apple Barn
Help identify and remove invasive plants from the Simsbury Farms Exercise Trail.

Avon Approves Ambitious Clean Energy Plan!

On April 4, Avon's Town Council approved the "Avon Community Energy Plan 2024-2026" to reduce energy consumption overall while increasing clean energy production. We interviewed Assistant Town Manager Grace Tiezzi, who worked with the Avon Clean Energy Commission to develop this important plan. See the plan:

https://www.avonct.gov/sites/gf/files/yvhlif151/f/uploads/final_toa_energy_plan_2024.04.04.pdf

Newsletter: Please describe the process of creating the "Avon Community Energy Plan 2024-2026."

Grace Tiezzi: The plan was approved by our Town Council on April 4, 2024. The new plan is a successor to plans in 2012 and again in 2016 which focused on municipal and board of education energy use only. This plan is more expansive in that it includes goals for municipal buildings, schools, residential and commercial buildings, and transportation.

The plan was started by the Avon Clean Energy Commission. We worked with an outside consultant, PACE (the nonprofit People's Action for Clean Energy), to organize data on our town and provide some analysis. PACE provided the expertise that allowed us to complete the plan mostly in-house and that allowed the Commission to really feel a sense of ownership of the plan. We also leaned heavily on the West Hartford Clean Energy Plan as an example of an outstanding document. Finally, we worked closely with the Town and the Board of Education staff for operations and technical expertise. (con't next page)

(Grace Tiezzi Interview Continued)

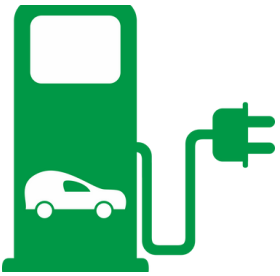
Newsletter: The short-term goals in your plan appear to be both practical and achievable. Can you discuss?

Grace Tiezzi: There are many things that we cannot control here in Avon like state laws or the policies of utilities. So, what we wanted to do in this plan was to create a culture of conservation in our town using education and leading by example to help people change their perspective and adjust their behaviors. For example, the town installed heat pumps in several of our municipal buildings (e.g., the Historical Society, the Recreation Department, and the Senior Center - in progress), installed a geothermal HVAC system at our Library, and mounted solar panels on the high school, the middle school, Roaring Brook Elementary, and the Public Works office. As a town government, we hope to model innovative projects and provide educational opportunities for residents and businesses to show them that these technologies can be used and applied in a way that's appropriate for their own situation.

ELECTRIFY EVERYTHING!

"Electrification" means replacing technology powered by fossil fuels with technology that is powered by electricity. As the grid gets cleaner, whatever it powers also gets cleaner.

Many of our cooling systems—like air conditioners and refrigerators—are already electrified. But many of our systems for water and space heating aren't. To heat our homes, we can replace natural gas- or oil-fired furnaces with energy-efficient electric heat pumps, and to get around, we can replace our gas-powered cars with electric vehicles. Why electrify?



- ⚡ Electrification is key to combating climate change. Burning natural gas, oil or propane for furnace systems, cooking, and water heating contribute 10% of all climate pollution in the United States. Gas-powered vehicles contribute 29%.
- ⚡ Electrification is more efficient. For example, a gasoline-powered vehicle wastes 80% of the energy in its fuel as heat exhaust. So, with \$4.00 gallons of gasoline, only 80¢ of it gets you closer to your destination. An electric vehicle, with regenerative braking, transforms 87% to 91% of its electricity into moving your vehicle. The same principle applies to stoves. "The per-unit efficiency of induction cooking tops is about 5 to 10% more efficient than conventional electric resistance units and about three times more efficient than gas," a spokesperson for the U.S. Environmental Protection Agency told TIME magazine.
- ⚡ Electrification may lower your costs. According to the EV Club of Connecticut, for a Tesla Model 3, a full charge costs about \$12.48, which allows for a driving range of 310 miles. For a gas-powered car, assuming 30 miles per gallon, to drive the same distance would cost \$35.
- ⚡ Burning natural gas in our cooking produces nitrous dioxide, carbon monoxide, and benzene, which may exacerbate health problems and increase the likelihood of childhood asthma.

To learn more about this and other subjects, visit the source websites:

www.Yaleclimateconnections.org (Electrifying Transportation)

[Time.com: Best Stoves](https://www.time.com/time/health/article/0,8599,2083837,000000-000000-000000-000000-000000,00.html)

EVClubct.com



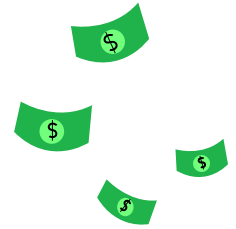
Interested in upgrading your home to all-electric appliances and vehicles?

Generate a personalized electrification plan based on your particular home, lifestyle, and priorities — all in just a few minutes.

For a personal electrification planner, visit Homes.rewiringarmerica.org

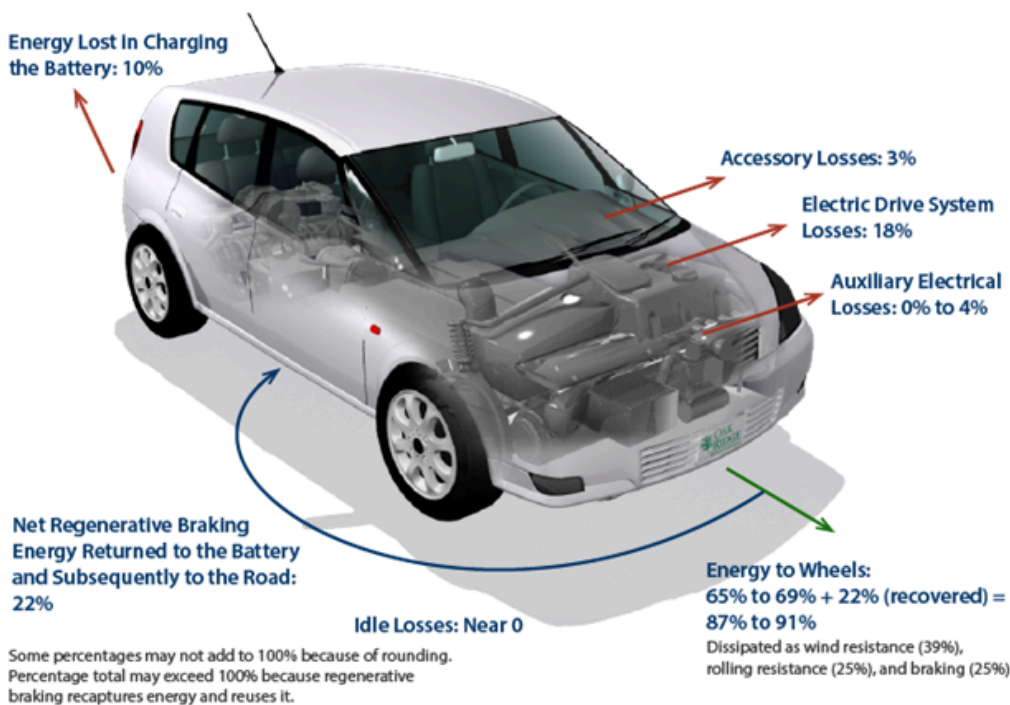
Rebates and Incentives for Electric Appliances and Electric Cars:

Information on CT incentives for electric appliances can be found on EnergizeCT.Com
Federal Incentives for EVs and Chargers information can be found on Fueleconomy.gov



Energy Requirements for Combined City/Highway Driving - Electric Vehicles

Click on blue text for more information.



ELECTRIFY YOUR VEHICLE!

To get a handle on the rapidly expanding market for electric vehicles in Connecticut, we interviewed Barry Kresch, president of the EV Club of Connecticut.

Newsletter: Why should people consider buying an EV with their next vehicle purchase?

Barry Kresch: There are many reasons to purchase an EV. The first is zero tailpipe emissions. Using EV's will better the air quality for all of us and reduce carbon emissions.

Also, EVs are fun to drive. They are quiet and accelerate quickly.

Further is the cost of ownership. Powering your car with electricity costs about one-third to one-half as much as using gas. Also, maintenance costs are much lower. There are no oil changes, no spark plugs or belts to change.

Newsletter: One of the barriers to EV purchase has been the cost of EVs relative to gas-powered cars. Has that changed?

Barry Kresch: That is changing fast. There are now several great EVs below \$30,000 like the Nissan Leaf and the Chevy Bolt, and many under \$40,000 like the Mini Cooper Electric SE, the Hyundai Kona, the Chevy Equinox, the Volvo EX30, the Fiat 500E, Tesla Model 3, among others. *(con't next page)*

(Barry Kresch Interview Continued)

Though the federal rebate program can be complex, a new EV may qualify for an incentive of up to \$7,500. Connecticut also offers incentives. Incentives are currently \$2,250 for an eligible new battery electric (BEV) and \$750 for a plug-in hybrid electric (PHEV), higher for income-limited individuals. Connecticut also helps residents to install chargers in their garages. Eversource and United Illuminating offer a \$500 rebate for the hardware and \$500 toward installation, plus an additional \$200 annually for participating in managed charging.

Newsletter: Another barrier has been so-called “range anxiety.” Can you discuss your experience?

Barry Kresch: I have two vehicles. One is a plug-in hybrid. So there is no range-anxiety since the electric system is backed up by a gas tank. My other vehicle is a Tesla. I have taken many long trips with the Tesla. The range for my Tesla is over 300 miles, there are Tesla charging stations all over the place and charging my Tesla for 200 miles takes about 15 minutes.

Other kinds of charging stations have been less reliable. But, that is about to change. All of the major automakers are switching to the North American Charging Standard (NACS) connectors that Tesla uses. Initially, there will be adaptors available for CCS connectors, but most 2025 EV models will have native NACS connectors. Tesla is gradually opening up its supercharger network to these other makes. It is expected that the other networks will up their game to compete.



Newsletter: What can Connecticut do to support the transition to EVs?

Barry Kresch: In the big picture, I would like to see the de-carbonization of all transportation. We should dedicate more spending to railroads, make buses free again, support active transport options such as hike and bike lanes/trails, and promote electric bicycles.

Connecticut still needs to provide more charging infrastructure, both level 2 destination chargers and level 3 DC fast chargers. In 2022, Connecticut was awarded over \$50 million from the federal Infrastructure and Jobs Act to expand EV charging infrastructure. Projects funded from this bill are expected to break ground this year. There are other grants as well.

Also, EV companies like Tesla and Rivian should be able to sell in Connecticut. Due to the franchise laws that date back many decades, new vehicles must be sold through an independent dealership. Manufacturers such as Tesla and Rivian are not permitted to open stores in CT. According to data from Bloomberg New Energy Finance and Atlas Public Policy, states that allow these new companies to sell directly have seen significantly higher rates of EV adoption.



EV LOCAL FACTS

Simsbury has a relatively high number of EVs:

505 as of December, 2023, or 2.4% of all vehicles vs. 1.2% for the state. For more information, visit [Portal.ct.gov](https://portal.ct.gov) and search for [Connecticut EV Fact Sheet](#).

Simsbury has 22 public charging ports, two of which are located at Town Hall.

For more information about Simsbury's charging ports as well as locations across the U.S., visit Chargehub.com

ELECTRIFY YOUR SCHOOL BUS!

By 2035, Connecticut state lawmakers have set a goal to have all school buses running on either alternative fuels or electric batteries, with a full conversion to electric by 2040.

With federal funding through the Environmental Protection Act's Clean Bus Program, Connecticut is receiving 50 electric buses this spring, with half going to Hartford Public Schools and the other half going to Connecticut Technical Schools.



Electric buses replace mostly diesel-powered buses which impact our air quality. Diesel exhaust is a known carcinogen, and contributes to asthma and other respiratory illnesses.

Recently, the town of Branford, CT committed to an all-electric school bus fleet over ten years, with 13 of 60 buses electric in the 2024-25 school year. (*Courant.com 04/092024*)

ELECTRIFY YOUR HOME HEATING AND COOLING!

Similar to refrigerators or air conditioners, heat pumps are highly efficient machines that use electricity and refrigerants to move heat inside in the winter and move heat outside in the summer.

There are several reasons to consider a heat pump if you are changing your heating or cooling system. One is cost. According to Connecticut HeatSmart, "The cost to heat a house with a heat pump is lower than that for oil, propane or electric baseboard, in some cases much lower. The cost is roughly on par with gas heat." Another reason is your carbon footprint. Heat pumps run on electricity and as the grid gets cleaner the carbon footprint of the heat pump diminishes.

There are several exciting case studies that demonstrate the capacity of efficient heat pumps. One is Maine. To reduce residents' heating costs and lower greenhouse gas emissions, Maine set up a rebate incentive program through Efficiency Maine. (*con't next page*)

(Heating and Cooling Continued)

Governor Mills' goal of installing 100,000 heat pumps in Maine by 2025 was met in 2023, two years early. The new goal is to add 175,000 more heat pumps by 2027. Efficient heat pumps have helped Mainers to cut costs and carbon emissions.

In the European Union (EU), heat pump installation is on fire. The EU has installed over 20 million heat pumps by 2023, about 16% of all residential and commercial buildings. Some countries are leading the pack. 60% of the buildings in Norway have heat pumps, 43% in Sweden and 41% in Finland. France, Italy, Germany and the UK have all made heat pump installation a priority.

In September, 2023, Connecticut was one the twenty-five states who pledged to collectively install 20 million heat pumps by the year 2030.

If you are considering a heat pump for your home or business, the best place to start is with a free consultation by EnergizeCT. See: [Energizect.com](https://www.energizect.com) and search for heat pumps

Sources:

[CNBC.com](https://www.cnn.com/2023/09/21/energy/heat-pumps/index.html) 9/21/2023

<https://www.heatsmartct.org/>

Heat Pump Study in Simsbury

We interviewed Christine Winters, Executive Director of the Simsbury Housing Authority, about the heat pumps in the Murphy Apartments.

Christine Winters: Using a grant, the Housing Authority installed 70 Daikin mini-splits heat pumps in the Murphy residences about 15 years ago. As those have gotten older, we have replaced them with Fujitsu mini-splits.

Residents say that the experience with both heating and cooling is good, and that the mini-splits also work as a dehumidifier. Residents have found heat pumps are definitely more economical than the previous electric baseboard heat that they used before.

In our experience, heat pumps work very well as long as they are kept clean.



The Simsbury Sustainability Committee newsletter
is published 6 times a year.

Follow the new Simsbury Green Coalition on Facebook for more sustainability news!



OUTSIDE - TENT TABLES

| | | |
|-------------------|-----------------------------|------------------|
| | ORGANIC VEGETABLES FOR SALE | |
| SEED SWAP | | COMPOST DEMO |
| HOUSE DESIGN | | LAWN EQUIP. |
| BIKING & E-BIKING | | KIDS' ACTIVITIES |
| | | |

OUTSIDE - LOWER PARKING LOT

| | |
|---|-------------------|
| | |
| DELICIOUS AND NATURAL FOOD! TRUCK RUNS ON BIODIESEL | ELECTRIC VEHICLES |
| | |

SUSTAINABILITY FAIR

SIMSBURY PUBLIC LIBRARY



JOIN US AT THE FAIR!



INSIDE AND OUTSIDE, THERE WILL BE SO MUCH TO DO AND LEARN!



SATURDAY
MAY 4
10AM - 2PM

CO-SPONSORED BY



REPAIR CAFE IN WEATOGUE ROOM

AT THE REPAIR CAFE, THERE WILL BE PEOPLE WHO CAN FIX:



YOUR BIKE

SMALL APPLIANCES



MEND A GARMENT



REPAIR A BROKEN CHAIR

IF YOU HAVE THINGS THAT NEED TO BE REPAIRED, BRING THEM TO THE REPAIR CAFE!



TRADESHOW IN THE FRIENDS ROOM

Visit all the tradeshow tables in the Friends of the Simsbury Library Program Room for information about sustainable businesses and groups.

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| | | |
| SOLAR & BATTERY STORAGE | HEAT PUMPS | |
| | | |
| STORM WINDOWS | RECYCLING | |
| | | |
| EV | SUSTAINABLE NUTRITION | |
| | | |
| HYDROPONICS | FOOD SCRAP COLLECTION | CONSERVATION |
| | | |
| CONSERVATION | CONSERVATION | |

TALKS IN THE TARIFFVILLE ROOM

- 10:00 - 10:30AM SIMSBURY LAND TRUST | SPEAKER: MARGERY WINTERS
SEEING RED: WHY FRIENDS DON'T LET FRIENDS PLANT BURNING BUSH
- 10:30 - 11:00AM EARTHLIGHT | POWERSMART | SPEAKER: DAVE MENDELSON
SOLAR AND BATTERIES: IS IT A FIT FOR ME?
- 11:00 - 11:30AM NEW ENGLAND SMART ENERGY | SPEAKER: RYAN BEHLING
HOME INSULATION AND EFFICIENCY 101: CHEAPEST, CLEANEST ENERGY
- 11:30AM - 12:00PM WOLFWORKS | SPEAKER: KYLE CRUZ, ARCHITECT
FUTURE FRIENDLY HOMES: HOW WE CHOOSE TO BUILD WHAT MATTERS
- 12:00 - 12:30PM EV CLUB OF CT | SPEAKER: BARRY KRESCH
WHAT TO KNOW ABOUT BUYING AND OWNING AN EV
- 12:30 - 1:30PM **SUSTAINABLE GOOD HEALTH FOR THE ENVIRONMENT AND YOU**
SPEAKER AND BEST-SELLING AUTHOR: **TERRY WALTERS**
DEMO AND SAMPLING INCLUDED! BRING YOUR OWN BOWL AND FORK.
- 1:30 - 2:00PM BLUE EARTH | SPEAKER: SAM KING
COMPOSTING IN THE BACKYARD AND BEYOND

CLIMATE ACTION

CLIMATE ACTION

CLIMATE ACTION

CLIMATE ACTION

VISIT THE TENT TO ENTER THE RAFFLE FOR A RAIN BARREL!

DONATED BY: **AQUARION** Water Company