

Volume 4 Issue 3

# Catoctin News

Newsletter of the Catoctin Group serving Carroll, Frederick and Washington Counties

Fall 2017

# "Special Gasoline"

## By Electric Vehicle Association of Greater Washington DC<sup>1</sup>

Imagine you had a car that used "special gasoline" which cost \$1.30 a gallon.<sup>2</sup> Imagine also that you could get this special gasoline in your garage without trips to a gas station. This special gasoline car would have next-to-no maintenance, mainly changing tires and wiper blades as needed. It also is a torque monster—you regularly find yourself blasting off from stoplights. Also, it has a super smooth ride and is whisper quiet.

In exchange for this new, refreshing, economical driving experience, the only "downside" is that this

special gasoline will take you about 100 miles before the car needs refilling. At home it takes about 20 seconds to connect up the special gasoline supply line, and long before morning, you're full. Also, special gasoline filling stations are popping up all over, so

it keeps getting easier to refill while you're on the road.

Of course, as you've no doubt figured out, the "special gasoline" is electricity, and filling up your car means plugging it in. And drivers are responding: sales of plug-in electric vehicles in the U.S. have been rising. Sales grew 36% from 2015 to 2016, and sales so far are up 38% from the same period last year.

That increase is all the more remarkable since gas prices have been less than \$2.50 a gallon for a while. Our guess is that car buyers are learning about the advantages EV owners already know: fun and fast acceleration, quiet operation, low maintenance costs, and low per mile fuel costs. You get used to that \$1.30 "special gasoline" real fast. Another benefit sometimes the price of gasoline can look like the EKG of a hummingbird. By comparison, the price of electricity is solid as a rock.

Affordable electric vehicle range is increasing from 100 miles to between 220 and 310 miles with the



Photo: Western Slope Toyota Official Blog

introduction of the Chevrolet Bolt, new Nissan Leaf, and the Tesla Model 3. With the added miles, these cars pretty much eliminate "range anxiety", the fear of running out of power which is real though misplaced because most folks drive less than 40 miles a day.

Charging is simple. Most charging is done at home. Like your cell phone, plug in your car, and it will power up while you sleep. Charge time will depend on the car and miles driven, generally between 2 and 5 hours. Also, more and more public charging stations are being built,

> including high-speed DC fast chargers which can provide 60 to 150 miles of range in under 30 minutes.

> Finally, consider that EVs reduce carbon emissions. The nonpartisan Union of Concerned Scientists (UCS) created the

measuring unit CO2e, a carbon dioxide equivalent that quantifies a vehicle's greenhouse gas emissions. The higher the CO2e, the higher the greenhouse gas emissions. A battery-powered EV in suburban Maryland generates 140 grams of CO2e per mile, 63% less than the 381 grams of CO2e spewed out by a fossil-fuel powered car. Further, EVs will continue to get cleaner as the grid gets cleaner. Better yet, install solar panels on your home, and you could be "Driving on Sunshine".

With around 1% of U.S sales, plug-in electric vehicles have a long way to go before they can claim mass acceptance. When the inevitable changeover happens, it will come with breathtaking speed. Volvo recently announced that it will no longer make pure internal combustion engine (ICE) cars by 2019. VW plans 30 new EV models by 2025. Other manufacturers have also released big EV plans. We are entering the beginning of the end of the ICE age.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> EVADC, <u>www.evadc.org</u>, is an electric vehicle advocacy nonprofit which serves the greater DC area.

<sup>&</sup>lt;sup>2</sup> Maryland costs. Check out the costs for your state at <u>https://energy.gov/articles/egallon-how-much-cheaper</u> it-drive-electricity

<sup>&</sup>lt;sup>3</sup> See "Death of the Internal Combustion Engine", The Economist, August 10, 2017

# Composting (Anyone Can Do It) BY DAVE BARROW

Composting is an easy and efficient way to dispose of waste. Compost is a nutrient rich material used to improve the quality of the soil. Unlike manmade fertilizers, which only help the plant grow, compost converts Maryland's clay soil into topsoil. This can improve plant growth without the need for fertilizers. The beauty of this is once the soil has become topsoil, it will last for years feeding plants without the need for fertilizer. Moreover, composting not only improves the soil, it reduces the amount of nitrogen that gets into streams, improving water quality. The following steps are used for making compost and apply to all composting methods:

- 1) Create your compost by adding 3 parts of carbon for 1 part nitrogen (see chart).
- 2) Add some of your old compost (not required, but composts faster). This will add microorganisms which will feed on the organic material to help break it down.

(continued, following page)

Type of Material	Details
lds Carbon	
Cardboard	Shred into small pieces if you use it. Wetting it makes it easier to tear. If
	you have a lot, consider recycling instead.
Cereal and breads	Make sure it is buried deep in the pile to prevent rodents and other vermen.
Compost activator	You don't really need it, but it doesn't hurt.
Cornstalks, corn cobs	Best if shredded and mixed well with nitrogen rich materials.
Cotton products (100% only)	Cotton clothes cut or torn into small pieces, swabs with cardboard stick,
	balls.
Dryer lint	Compost away! Moistening helps.
Feathers	
Floral arrangements	
Food, dog and cat	
Latex ballons and gloves	Natural rubber will break down but takes more time.
Leaves (trees and bushes)	May contain materials bad for plants.
Nail clippings	
Newspaper	Shred it so it breaks down easier. It is easy to add too much newspaper, so
	recycle instead if you have a lot. Don't add slick colored pages.
Paper products (cupcake holders,	All acceptable except ones that have glossy finish, plastic like coatings.
tissues, napkins and paper towels)	Items that are shredded are best.
Pencil shavings	
Nut shells (peanuts, pistachio, pecan)	Slow to break down, okay left in finished compost. Walnuts shells are toxic to plants.
Sawdust and wood shavings (untreated	You'll need a lot of nitrogen materials to make up for the high carbon
wood)	content. Don't use too much, and don't use treated woods.
Plant trimmings	
Twigs	Break up into small pieces. Takes more time to break down than leaves, but
	can be left in the finished compost to continue breaking down.
Wool clothing	Cut or torn into small pieces.
lds Nitrogen	
Algae, seaweed and lake moss	Good nutrient source.
Fruit and fruit peels	great source of nitrogen. Bury within compost pile.
Central vacuum waste	Pull apart the clumps, scatter around compost pile.
Coffee ground and filters	Great source of nitrogen.
Grass clippings	
Hair	Scatter so it isn't in clumps. Include hair from brushes and shavers.
House plants, dead with soil	Break up soil before adding to compost pile.
Manure (horse, cow, pig, sheep, goat,	Great source of nitrogen. Mix with carbon rich materials so it breaks down
chicken, rabbit)	better
Pumpkins	Smashed
Tea bag, grounds and filter	Great source of nitrogen.

## **Compost What's In/Out**

3) Mix the compost.

- 4) Make sure the compost is always kept moist (40% to 60%), not wet.
- 5) Weekly, turn your compost to loosen the material and add air. Each week you will find the organic material slowly breaking down. Your pile will heat up during the process. If your pile is between 90° and 130°, it is undergoing slow composting. When you have the right material mix, the compost heats up to 130° and 160°, causing fast composting to occur. At this temperature weed seeds are destroyed. If the compost heats to over 160°, you should add some water and turn it, as temperatures this high can kill the microorganisms and has the potential to spontaneously combust.
- 6) The compost is completed when the temperature drops to about 80° (approximately eight weeks). At this point you can start a new pile and add the compost to any area where soil improvement is desired.

My wife and I have composted using different methods such as using a tumbler. Tumblers are great for smaller properties where you have mostly food scraps, with few leaves and paper products to compost. Our tree farm creates too many leaves for the tumbler so we have moved on to larger compost piles. Annually we make 12 cubic yards of compost.

Methods to compost include tumblers, wire mesh containers, open air piles and windrows. Tumblers are best for city neighborhoods where you have limited space and want to keep odors to a minimum. Wire mesh allows more surface area to have access to air speeding the process. Some people substitute old wooden pallets for the wire mesh. Open air piles can be either placed and not turned, which takes six months to complete or you can regularly turn the pile and finish the compost in as little as eight weeks. Windrows are generally done by large operations. They are typically 100 feet long and mechanical equipment is used to turn the compost.

Another benefit of composting is to reduce the amount of trash that is sent to the landfill. Once in the landfill, it has no value, whereas if you keep it on your property you can improve the soil and/or use it as bedding material in gardens. Typical families who recycle and compost reduce the amount of trash that goes to the landfill to 20% of their total waste. This saves you money and reduces the amount of landfill space required.

Neutral but beneficial	
Beverages, kitchen rinse water	Good to moisten the middle of the pile. You want the pile to be at 40% to
2.05	60% mositure level.
Eggshells	Break down slowly. Crushing shells helps.
Nitrogen (don't use if the compost pile is	n't hot enough to kill the pathogens)
Bird droppings Diseased plants	May contain weed seeds or disease organisms. If your pile doesn't get hot enough, it might not kill the organisms, so be
	careful. Let it cure several months, and don't use resulting compost near the
	type of plant that was diseased.
Pine needles and cones	Don't overload the pile. Also acidic and decomposes slowly.
Sod	Make sure the pile is hot enough, so grass doesn't continue growing.
Weeds	Dry them on the pavement, then add later.
Don't put in the compost	
Ashes from untreated, unpainted wood	Fine amounts at most. Can make the pile too alkaline and suppress
	composting.
Ashes from coal or charcoal	Shredded leaves help break ashes down more quickly. Acidic.
Cat droppings or cat litter	May contain disease organisms. Avoid.
Citrus peels	Highly acidic and can kill worms
Dog droppings	Avoid.
Fertilizers, Synthetic	Introduces high levels of inorganic elements into the garden and heavy
	metals into the ecosystem.
Fish scraps	Can attract rodents and cause a stinky pile.
Labels on fruits and vegetables	Made of food grade plastics and vinyl, not biodegradable.
Lime	Can kill composting action. Avoid.
Meat, fat, grease, oils, bones	Avoid.
Milk, cheese, yogurt	Not recommended. Put it deep in the pile to avoid attracting animals.
Onions	Highly acidic and can kill worms
Branches	Biodegradable but very slow. Chip if you want to compost in a separate
	pile.

# **Proposed Pipeline**

**BY SHIRLEY LAMDAN** 

# Tell Governor Hogan that Washington County fears potomac pipeline risks!

ANNOUNCEMENTS

TransCanada, a giant energy corporation with a track record of pipeline leaks and explosions, requires Governor Hogan's approval for its pipeline construction. This pipeline is planned to transport gas from Pennsylvania to West Virginia under the Potomac River and C&O Canal National

Historic Park near Hancock.

Maryland will not receive any economic benefit from this project. What Maryland will receive, however, is the potential for risks of leaks

and explosions that could contaminate drinking water and ground water for Washington County and five to six million other people downstream. The Herald-Mail's excellent articles on the proposed pipeline highlight these issues.

Washington County, MD would be impacted first and worst by any potential hazard. Does the County have strategies to manage or mitigate gas leaks or explosions? If our drinking water or groundwater is affected, what plans and procedures are in place to protect our public health and safety?

For this project to proceed, Governor Hogan must sign off on a "401 certificate" which allows the states to act independently regarding a federal project impacting wetlands and waterways. Governor Hogan can say "NO"

to this project and its potential risks. You can express your opinion by contacting the Governor's office:

Phone: 800-811-8336 or 410-974-3901 Email: <u>governor.mail@maryland.gov</u> Mail: 100 State Circle, Annapolis, MD 21401

### 27th Annual Metropolitan Washington, DC Solar and Green Home Tour Saturday, October 7 Sunday October 8 11:00 am – 5:00 pm Details at: 2017 Washington DC Solar Tour of Homes



# Climate Change — Impacts & Solutions

Monday, October 9 8:00 am – 2:00 pm McDaniel College, Decker Auditorium 2 College Hill, Westminster, MD Presenter: Ron Kaltenbaugh



TRUTH TO POWER

An Inconvenient Sequel: Truth to Power Friday, January 5, 2018 Carroll County Arts Council Theater 91 Main Street, Westminster, MD Sequel to Al Gore's acclaimed Inconvenient Truth Afternoon & evening showings

Check website for exact times: www.carrollcountyartscouncil.org

### Upcoming Catoctin Group Meetings

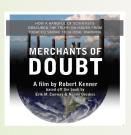
Saturday, October 7 10:00 am-12:00+ pm Thurmont Regional Library 76 E. Moser Road, Thurmont MD Lunch at local restaurant to follow.

Saturday, November 4 10:00 am-12:00+ pm Urbana Regional Library 9020 Amelung Street, Frederick MD Lunch at local restaurant to follow.

All those concerned about the health of planet are welcome to attend.

— Free Screening — Merchants of Doubt

Thursday, October 15 11:00 am – 5:00 pm United Methodist Church 7108 Fem Circle, Middletown, MD Presented by Environmental Justice Group



# **Environmental Fall Film Series**

**Before the Flood** with Leonardo DiCaprio About the ravages of pollution and climate change. Thursday, October 26, 6:00 pm

Thurmont Library, 76 East Moser Road Thurmont MD Saturday, November 4, 2:00 pm Thurmont Main Street Center, 11 Water Street Thurmont MD

**Bag** it

(or some other film about the plastic crisis) Thursday, November 16, 6:00 pm Thurmont Library, 76 East Moser Road Thurmont MD

Friday, December 1, 6:00 pm Thurmont Main Street Center, 11 Water Street Thurmont MD

Admission is free, snacks are provided, discussion follows all showings Information: Christine Maccabee 240-4469-7899 or songirdschant@gmail.com

# **COMMUNITY TREE PLANTINGS**

Join your community in achieving the goal of reforesting 30 acres in Frederick County to protect local streams and the Chesapeake Bay

Saturday, October 21; Saturday, October 28 Saturday, November 11, 9:00 am - 11:00 am Waterside Community, Frederick MD Along the Monocracy River & Tuscarora Creek **Further Information** www.streamlinkeducation.org/plantings/

To sign up: lisa.streamlink@gmail.com

**Calling ALL Volunteers!** 

# Sierra Club Endorsee Michael O'Connor Wins Frederick Primary

**Voter Registration** September 22 to October 6

**General Election** November 7



Only 14% of registered voters cast primary ballots.

#### – Your Vote Counts! –

https://www.ecowatch.com/environmentalistsvote-2482958974.html

#### **Officers/Committee Chairs**

Lee Popkin

**Chairman & Energy** Dan Andrews

Treasurer Anthony lacovelli Secretary & Outreach/

**Social Media Amy Andrews** Conservation Anthony lacovelli Outings Harry George



**Newsletter & Outreach** Lew Sherman

**Further Information** http://<u>www.sierraclub.org/</u> maryland/catoctin-group

