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# Climate Change Language and Connections Matter

By Ron Kaltenbaugh

Many people reading this article will already be on board and concerned, to some degree, about climate change. If you are concerned, there is a good chance that your concern stems from an environmental perspective. For several decades, addressing climate change has mostly been framed as an environmental

issue and championed by environmentalists. This is understandable; however, we are past the days when we should talk about saving the earth and show pictures of polar bears. Before you get too worked up, it is not that those items are unimportant. Anyone that cares about climate change for "environmental" reasons is most likely already on board.



The iconic Apollo 8 Earthrise photograph.

## **Six Degrees of Climate Change**

In the mid 1980's, there was a popular game called Six Degrees of Kevin Bacon. Movie buffs would try to connect anyone in Hollywood to actor Kevin Bacon by finding the shortest path that linked someone to the actor. If you worked in a film with Kevin Bacon, your Bacon Number was 1. Harrison Ford's Bacon Number is 2 because he was in The Possessed with Joan Hackett who was in Only When I Laugh with Kevin Bacon. So, what does this have to do with Climate Change? This is about how things are interconnected. I contend that almost no other issue has as many direct or indirect connections as climate change does. To truly galvanize mass support for deep, speedy, and serious action on climate change, we need to seek out those connections. We need to engage more people and show them that acting on climate is in their best interest based on concerns they already have.

#### **Language Matters**

So, what does this mean in practical terms? For one, it means that language matters. If you are

trying to convince someone to take or support climate action, find out how to connect climate to the issues they care most about. Then learn the language around that issue. For example, utility executives with lots of coal or natural gas plants may be hard to convince. However, it will be much

more likely if you discuss the real possibility of fossil fuel plants becoming stranded assets. A stranded asset is something that becomes obsolete or uneconomic before the end of its expected lifetime. So, the utility execs may or may not care about climate change. However, they will care about their assets and investments becoming stranded due to the

massive cost declines in wind, solar, and other technologies. The key is that we need to expand the group working on climate solutions by finding ways to connect climate impacts and solutions to more areas.

#### Earth Day is not about the Earth

The iconic Apollo 8 Earthrise photograph is credited as being one of the keys to the modern environmental movement and the first Earth Day. However, it is important to remember that the Earth will continue to exist no matter what we do. The question is whether or not it will provide us with a biosphere that is hospitable to us, our children, and future generations. Instead of Earth Day we should really talk about Friendly to Humans Biosphere Day. Unfortunately, that is not a very catchy name. Nonetheless, we need to think outside of the environmental box so they we can convince more people that they also care about climate change, just for different reasons

## Eastalco "New Town" Designation

By Vanessa Gress

The residents were worried about the environmental issues, lack of infrastructure such as roads and schools, preservation of agricultural and historical areas, and potential for urban sprawl in the rural area.

Eastalco was an aluminum manufacturing plant located in Adamstown, Maryland that operated from 1969 to 2005 and began closure/demolition in 2010. The Livable Frederick master planning document designated the former plant as a "new town" or "community growth area," which meant that it could be redeveloped for residential/commercial development. As part of the Frederick County Council's amendment process for Livable

Frederick, Councilman Kai Hagen spoke to residents of the Adamstown area and found that most were opposed to this future development of the 2,200-acre parcel. Councilman Hagen proposed removing Eastalco from this "new town" list due to the lack of sufficient infrastructure in place in Adamstown and the preservation of agricultural land on the parcel.

Eastalco Aluminum Company | Mapio.net

According to reports on file with the Maryland Department of the Environment (MDE), the manufacturing operations at Eastalco led to soil, groundwater, and surface water contamination on the approximately 300-acre area of the former plant. Known carcinogens have contaminated the property, including polychlorinated biphenyls (PCBs), tetrachloroethene (PCE), poly-aromatic hydrocarbons (PAHs), and arsenic. There are two closed industrial waste landfills on the property that have to be monitored. Additionally, 10 debris disposal sites were uncovered as closure activities took place. The State Hazardous Waste Site case for the property was closed by the MDE; however, there is still residual contamination onsite and the owners will have to continue long-term monitoring of the groundwater, surface water and soil contamination.

When the MDE issued closure of this case, they put in place engineering and institutional controls that are required to be implemented to

protect people from the residual contamination. As part of these controls, the identified Soil Management Area (300-acre area) can only be restricted to commercial or industrial use. The levels of residual contamination onsite were compared to the MDE's restricted commercial and industrial standards, not residential standards. Any development onsite will have to follow the controls put in place, and if a

developer wants to build residential buildings in the Soil Management Area, additional cleanup/monitoring would be required.

Councilman Jerry Donald, who represents the Adamstown area on the council, wanted to keep the "new town" designation due to the new opportunity for residential development, and to accommodate the

owner's wish to sell the entire 2,200-acre parcel. However, as the local residents learned about the proposed plans, they put pressure on the County Council to remove the "new town" designation. The residents were worried about the environmental issues, lack of infrastructure such as roads and schools, preservation of agricultural and historical areas, and potential for urban sprawl in the rural area. The council then came together to completely re-work the Eastalco portion of Livable Frederick. The "new town" designation was removed. The new amendment that was unanimously passed by the council requires community feedback and the consideration of environmental, economic, and historical issues before any redevelopment. Thanks to the efforts of Councilman Hagen and the involvement of the local community, citizens successfully fought against overdevelopment and further degradation of the environment.

# **Hydrogen Fuel Cells Driving the Future**

By Dan Andrews



Did vou know it's very possible there may be a hydrogen fuel cell in your future? Yes, there's a fascinating invention called a hydrogen (H2) proton exchange membrane (PEM) fuel cell, an electrochemical device that can separate a hydrogen proton from a

hydrogen electron. Once the electrons are isolated they can form an electrical current which can be used to power a multitude of mobile and stationary products including, cell phones, computers, e-bikes, scooters, motorcycles, boats, trains, forklifts, aerial drones, airplanes, submarines, cars,

trucks, buses homes and buildings. The emission from a H2 PEM fuel cell is clean 170F hot water, which can also be used in combined heating power systems

Many countries are moving forward with H2 infrastructure systems to help bring fuel cell to These include: China, Australia, South Korea, Japan, Germany, France, Spain, Poland and the United Kingdom. The United States is moving forward as well, specifically within California and the northeastern states, which have formed a multistate Zero Emissions Vehicle Task Force, of which Maryland is a member. This task force is working to establish both a H2 fueling infrastructure and an electric vehicle charging station network for battery electric vehicles (BEV's). Visit www.zevstates.us.

A key factor to make H2 fuel cells nearly emission

free depends on how the H2 is derived from either water or other chemicals. Therefore, H2 is classified as either grey, blue or green based on the process by which it was derived. I'll write more about this in a future article.

Safety is a concern with H2 as it is a pressurized gaseous fuel, and much research and development has been done to

develop safety standards, review crash testing, and ensure proper storage and leak detection methods.

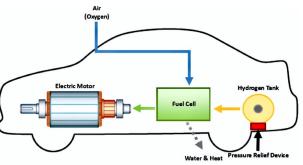
Currently, many major car companies are developing and producing H2 fuel cell vehicles (FCEV's) including Hyundai, Honda, Toyota, Audi/ VW, Mercedes Benz, Ford, General Motors and

Chrysler/Fiat. Large trucking companies such as Kenworth & Cummins are developing fuel cell / battery trucks as well. A new company, Nikola Motors Inc., is building a manufacturing plant in Arizona to produce large e-trucks.

I believe both BEV's and FCEV's will be integrated into our transportation network which will allow for greater diversity and cleaner transport. H2 fuel cells, in general, will be used in many ways due to their scalability, versatility and positive environmental advantages.

To follow up-to-date fuel cell developments, projects, and progress visit: www.fuelcellsworks.com and www.hydrogenfuelnews.com.

To see how a H2 fuel cell works please consider watching: https://m.youtube.com/ watch?v=9EQlWPra210.



HydrogenFuelCellVehicle1.5 image courtesy of FIREHOUSE

SIERRA

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**Further Information** 

http://www.sierraclub.org/maryland/catoctin-group

# Flexible Plastic Film — Recycling Guidelines

By Betty Arnall



There is considerable confusion over what types of flexible plastics can be recycled in our area. None of it can be placed in the single stream recycling bins, because it becomes entangled in the machinery at recycling

facilities. But you can and should recycle it at designated locations in your community.

Drop-off boxes at grocery stores and other retail locations offer a way to recycle different kinds of

Two important tips from several sources are these. If it is a mailer or other plastic with paper labels, remove the label before recycling. Also, plastic must be clean and dry; no food residue, no crumbs, no liquid. If the residue doesn't come off easily, they suggest you not recycle.

To find a Store Drop-Off location near you go to:). https://www.plasticfilmrecycling.org/recycling-bags-and-wraps/find-drop-off-location/. Other systems have other drop off locators.

Plastics recycled in these drop-off boxes are made into various products such as: containers, crates, pipe, railroad ties, new bags and film. Other products

#### **RECYCLABLE**

- Bags & wraps labeled #2 & #3
- · Plastic shipping envelopes
- · poly mailers & poly bubble mailers
- Ziploc & other re-sealable bags
- · Plastic grocery bags
- · Plastic retail bags
- · Newspaper sleeves
- Ice bags

- · Wood pellet bags
- · Dry cleaning bags
- Bread & produce bags
- Bubble wrap
- · Salt bags
- · Cereal bags
- · Case overwrap, such as water bottles
- Toilet paper, napkin & paper towel wraps

#### **NOT RECYCLABLE**

- · Biodegradable/compostable bags
- Chip bags
- Candy wrappers
- · Most pet food bags.
- · Frozen food bags
- · Pre-washed salads mix bags
- · Six pack rings

plastic normally not accepted by Material Recovery Facilities (recycling centers). I'm sure most of you use the drop-off boxes for grocery bags, but some of you may be unaware of additional items that can go in them. I have been following the basic rule: "if it stretches, it is plastic that can be put in the drop-box with plastic grocery bags". However, I did it with some apprehension. When I questioned cashiers in Lowe's and Martins for instance, they did not know what material was acceptable.

Thanks to some research, I found specific information on what can go in those drop-boxes. The table accompanying this article, incorporates a list of recyclable film plastics from an article distributed by PAC, a company that produces polymailers and other recyclable packaging products. The list has been confirmed by the Frederick County Recycling Office. Not only have I been doing the right thing with my paper towel and toilet paper wraps, my bread bags, my worn out reused Ziploc bags, but I also found other plastic wrapping that I could recycle.

Not all plastic sheet, can be recycled in drop-boxes. Frozen food bags and pre-washed salad mix bags have a polymer liner that makes them unfit for recycling. If you don't see the item listed in the table and you don't see the How2Recycle label <a href="https://www.how2recycle.info/don't leave">https://www.how2recycle.info/don't leave</a> it in Store recycling bin.

include composite lumber for fences, benches, decks, doors and window frames, and playground equipment. A company in Winchester, Virginia recycles more than a billion bags each year. Foreign markets have decreased acceptance of US plastics, but the 2017 National Post-Consumer Plastic Bag & Film Recycling Report shows increased domestic use of the material. People are encouraged to use recycled products so that recycling becomes profitable for businesses.

In the next quarterly newsletter, look for an article about planned surveys in Frederick and Washington counties of what people are using to carry their purchases from grocery stores. A group of Catoctin Sierra Club members are following activities of Howard County members as they work toward a goal of a 5-cent fee on all disposable bags. This fee has been in effect in Washington, D.C. and Montgomery County, MD for years, and there is evidence that it has increased the use of reusable bags considerably. At a recent training session, the three members learned details about the survey and the fee. Hopefully, there will be interest in bringing it to Frederick and Washington Counties.

### **ANNOUNCEMENTS**

# **2019 MARYLAND JAMBOREE**









# October 11-13 \* Sharpsburg, MD

Join Fellow Sierrans at the Chapter's Premier Biennial Event

EXPLORE, ENJOY & PROTECT OUR PLANET AT THE BEAUTIFUL SHEPHERD'S SPRING OUTDOOR MINISTRY AND RETREAT CENTER

See the following links for detailed information on registration, accommodations, food, activities, agenda and more:

https://www.sierraclub.org/maryland/jamboree2019

## **Upcoming Tree-Planting Opportunities**

The Catoctin Group supports and participates with the local organization "Stream Link" to plant trees near water courses and flood plains throughout Frederick County. Their fall scheduled plantings as follows:

### — CALLING ALL VOLUNTEERS! —

Tree planting season is here and local reforestation efforts are underway in Frederick County! Sign up today to volunteer to plant trees on:

October 5, 19, & 26, Thurmont, MD November 16, Frederick, MD (\*Maintenance event, space is limited)

9 am — 11 am

Visit <a href="http://www.streamlinkeducation.org">http://www.streamlinkeducation.org</a>/ plantings for more information and to sign up. Invite all your friends and family! These are fun events for ALL ages.

**Stream-Link Education** is a non-profit organization that relies on volunteers and financial support from our community to further our mission and continue the work of planting riparian forests to restore our

local streams and the Chesapeake Bay. In addition to the upcoming tree plantings, we are organizing a TRICK or TREE virtual 5K! Proceeds go to Stream-Link Education to support tree planting efforts. Its only \$30 to register, you get a glow in the dark medal, your own runners bib, and you can run whenever, wherever, and with whomever you want! Sign up now to receive the link to register on September 15 or check back in. Register by Halloween to be entered to win a free Ghost Tour to explore Maryland's most haunted city, historic Frederick!



Visit <a href="http://www.streamlinkeducation.org">http://www.streamlinkeducation.org</a>/run

Questions: Contact Lisa Baird at lisa.streamlink@gmail.com Telephone: 443-538-6201.

# Floods, Droughts, & Justice

## A Multifaith Discussion on Climate

Sunday, October 20th, 12-4:30 pm Hood College 401 Rosemont Avenue, Frederick \$15 registration, \$25 with lunch\*

Register: www.ipldmv.org/macsconference

Join caring folks from across Frederick's diverse faith communities for an afternoon of learning and conversation. Join the Multi-faith Alliance of Climate Stewards, with Hood College, Interfaith Power & Light (MD.DC.NoVA), and Interfaith Partners for the Chesapeake to:

- learn how climate change will impact our region
- be inspired by work underway in our congregations, local government, businesses, and neighborhoods to reduce our carbon footprint and to work for a just and thriving future in our warming world
- connect with opportunities to take climate action: at home, in our congregations, and across our community



Our keynote speaker,
Maryland's own climate
scientist **Dr. Don Boesch**, will
remind us about the future we
face in Frederick and why it
matters. Two panel
conversations will explore how
our communities are
responding and can take
further action together, and an
expo will connect attendees
with partners and resources.

We're looking forward to gathering and learning with you! Register today: www.ipldmv.org/macsconference

\* Your payment will support Frederick County congregations coming together to address climate change. Please contact us at 202-709-7641 to discuss our scholarship options if the \$15 registration fee would create a financial hardship for you.







