

## Change is here

Change is happening! And it seems to happen ever so quickly. Not only did Barbara Walters die, and she was one of my favorites, but Judy Woodruff is retiring. Judy Woodruff is to reporting what Elizabeth Kolbert is to the environment. Change, damn it. I can't stand it.

I have followed Judy for decades. She moved into public broadcasting at least 20 years ago. For the last 10 or so years, she has been the lead broadcaster for The News Hour on PBS. If you watch news on public television, you'd be familiar with Judy. She is unfailingly neutral, never biased and totally objective in reporting the facts, not opinions. I will miss her.

Elizabeth Kolbert, much in the same vein, reports on the environment. But her reporting is different. She is never neutral. She has a purpose. She uses facts to convey, defend and support her message, which is really: change must happen or we are doomed. She is a gifted writer and weaves her messages with detailed facts.

While Judy has retired and has a new assignment at PBS, Elizabeth is continuing her quest to bring change at any cost to our lifestyle. She understands the nuances of geopolitical issues, the haves and the have nots, the weak and the strong. She is highly technical, but her writing is persuasively down to earth. Her messages are always supported by fact, but unlike Judy, she is totally biased. "If we don't change, rising temperatures, global warming, will cause havoc in our world."

More on Elizabeth in another column.

Change is coming, and in many ways it's dynamic! First, the news from St. Paul, MN, is exciting. 3M has announced they will phase out per- and polyfluoralkyl substances (PFAs) manufacturing and work to discontinue the use of PFAs across its product portfolio by the end of 2025. Woah, that is huge.

The company's decision is based on careful consideration and a thorough evaluation of the evolving external landscape, including multiple factors such as accelerating environmental, social and governance (ESG) trends focused on reducing or eliminating the presence of PFAs in the environment and changing stakeholder expectations, the company says in a news release.

"This is a moment that demands the kind of innovation 3M is known for," 3M chairman and CEO Mike Roman says. "While PFAs can be safely made and used, we also see an opportunity to lead in a rapidly evolving external regulatory and business landscape to make the greatest impact for those we serve. This action is another example of how we are positioning 3M for continued sustainable growth by optimizing our portfolio, innovating for our customers and delivering long-term value for our shareholders."

The cynic in me says "lawsuits," but it is 2023 and I want to be charitable and think positively. What fascinates me most is the fact that we have the ability, technically, to replace unfriendly chemistries with

More blah, blah, blah, according to Greta. But in the United States, we had a change and President Joe Biden was quoted, "I can say with confidence that I have never been more optimistic about America," after signing the Inflation Reduction Act (IRA). This bill, much watered down to get Senator Joe Manchin (D – West Virginia) to agree, authorizes federal spending of more than \$350 billion dollars on climate initiatives that will reduce greenhouse gas and support the growth of new industries focused on climate change. The implementation of IRA will take time and focus, but in my view this change is a master step. Chalk one up for the good guys.

Over the last several years I have mentioned Coca-Cola in probably less than glowing terms. (Am I a Cassandra?) I did defend them when Greenpeace criticized them for generating green cullet instead of clear. But their most recent announcement is noteworthy. They have introduced bottles with caps that stay attached. I love this!

Coca-Cola Co.'s British business said it would introduce packaging that keeps plastic lids tethered to bottles when opened to make it easier for consumers to recycle drink packaging in its entirety.

Plastic bottle caps can be recycled but are often lost, discarded or end up as litter, Coca-Cola said in a statement. The new design aims to reduce that, the company says.

The hinged lids will start rolling out soon on 1.5-liter bottles of

more environmentally stable polymers. The real key to issues like this is to make the changes before we have catastrophic results. I am excited for the change and pleased that 3M, and DuPont for that matter, recognize that old technology is unacceptable.

I also want to make note of a change by British Petroleum (BP North America). BP North America has acquired Archaea Energy, a renewable natural gas (RNG) company. This is a big deal in my view as BP is adding more friendly gas production to its portfolio. I'll spend more time on this change in my next column. It is a move in the right direction by one of the largest fossil fuel manufacturers in the world. RNG comes from waste methane, which is far more potent than carbon dioxide and therefore far more apt to affect global warming. I'll write more about this and anaerobic digestion in my next column. Suffice it to say, like 3M, this is a major healthy change for BP and the world!

Many of you heard or read the recent development for clean, plentiful energy produced by nuclear fusion. I know that commercial production is years away, but this change, this development, is one of the most exciting and promising in years. There are a number of experiments occurring here in the US and one in Southern France. Really, energy from nuclear fusion is an incredible opportunity to produce plentiful volumes with no "meltdowns, no planet-baking carbon emissions, and no radioactive waste."

The US contingent is moving a bit more quickly than the consortium in France. "US scientists made a major advance in the field of nuclear fusion, taking the energy generating process from the realm of science fiction to a potential real world power source."

"The revolutionary leap, 'change,' took place on December 5 at the National Ignition Facility at California's Lawrence Livermore National Laboratory (LLNL)."

Kim Budill, director of LLNL says, "The pursuit of fusion ignition in the laboratory is one of the most significant scientific challenges ever tackled by humanity, and achieving it is a triumph of science, engineering, and most of all, people. Crossing this threshold is the vision that has driven 60 years of dedicated pursuit – a continual process of learning, building, expanding knowledge and capability, and then finding ways to overcome the new challenges that emerged. These are the problems that the US national laboratories were created to solve."

The technical aspects of this development are incredibly complex. Additionally, the economics pale the imagination. The whole point is success, which is the doormat of change. Our scientists have proved it is possible, and now they have to prove competitive economics and practicality.

In 2022 we held a conference of the parties, COP27 in Sharm El-Sheikh, Egypt. As Greta Thunberg of Sweden might say, "blah, blah, blah, and more blah." This conference did bring agreement that the "rich nations have to help the poor nations," but when and how much?

Fanta, Coca-Cola Zero and Diet Coke in Scotland, and all plastic bottles across Coca-Cola's brands will adopt the new design in the UK by 2024, the company states.

The design is part of Coca-Cola's strategy to help create a "circular economy" for its plastic products amid regulation and calls to reduce the amount of its plastic packaging that ends up in landfills and elsewhere.

I think this is pretty neat, and while miniscule when compared to the nuclear fusion development, it is here and now. How many bottle caps have you thrown away or ignored on the ground when walking? Plenty, for sure.

My message for 2023 is change. Sometimes it makes us sad like the loss of Barbara Walters or the retirement of Judy Woodruff. At the end of the day, change is good, change is progress and isn't progress good? Welcome, 2023.

Another Letter From the Earth. **LNW**



Calvin Frost is chairman of Channeled Resources Group, headquartered in Chicago, the parent company of Maratech International and GMC Coating. His email address is [cfrost@channeledresources.com](mailto:cfrost@channeledresources.com).