

SSAFE Newsletter

Senior Stewards Acting for the Environment



In This Issue

COP26 Climate Talks

The "last best chance" to keep the earth from dangerous warming.

Electric Vehicles

Fewer gasoline cars on roads reduces greenhouse gases.

Elders in Action

Hydroponics, diet, reduced electricity usage programs support climate action goals.

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Pakistani girls walking to school in flooded streets. At COP26, countries most vulnerable to climate change urged developed nations to act.

Photo Credit: Jamal Dawoodpoto, Unsplash Photos

COP26 Climate Talks— Is Greta Right?

*From Larry Daloz, Contributing Editor
Kendal at Hanover*

The conference began with the gravelly voice of David Attenborough expressing the hope that “young people alive today perhaps will give us the impetus we need...to turn this tragedy into a triumph.” It ended with Greta Thunberg outside the conference hall declaring, “The grown-ups have failed us,” and together with a group of those same young folks, bitterly chanting their dismay.

cont'd p.2

COP26 (cont'd)

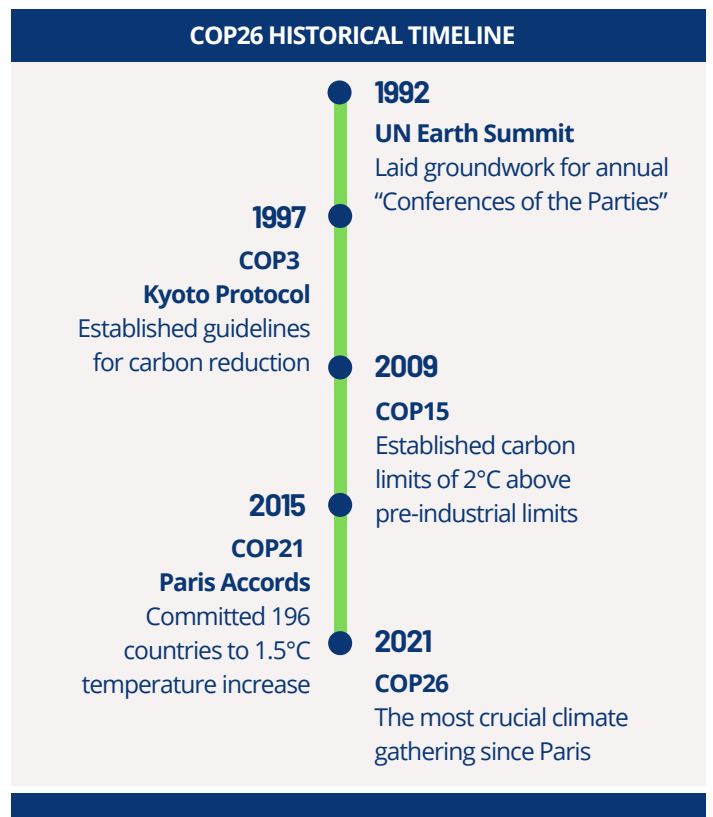
The odds are that most of those who made the major decisions inside the halls of the Scottish Event Campus will be gone within a few decades. What does Greta know that we don't? Back before she was born, with the global carbon dioxide level at 360 parts per million, several thousand people from 178 nations flocked to Rio de Janeiro in 1992 to set in motion a series of international conferences to return us to a safe level of 350 ppm by the year 2000. It was, by all reports, a joyful and hopeful event.

"The drive towards 1.5°C for a cleaner, healthier, more prosperous and more resilient world must continue."

— Alok Sharma, COP26 President

Now 25 mostly annual meetings later, with the 26th concluded under the hottest annual temperatures human beings have ever known and CO₂ at 420 ppm, have we grown-ups failed?

Actually, there is a lot of good news. We agreed to harness methane emissions and to stop deforestation significantly. Furthermore, the US and China publicly committed to work together to combat warming. With booths touting everything from promising nuclear initiatives to fashionable handbags made from old firehoses, the event had a trade show feel, wrote one reporter.



And although neither Putin nor Xi Jinping showed up, their delegations did. Third-ranked emitter, India's Modi, promised significant cuts, President Biden declared that America was back, and Barack Obama received a standing ovation as he urged the young protesters—who were legion but almost all outside the walls—to turn their frustration to action. We were off to a pretty good start.

Within a few days, however, things began to go slack as we learned that the emissions claims of many nations had been grossly falsified, that despite efforts to ban them, hundreds of fossil fuel lobbyists were present, and that even if nations actually met the goals they submitted, the total would leave us at 2.4°C, far over the mark necessary to avoid devastating consequences.

cont'd p.3

COP26 (cont'd)

By the end, although for the first time fossil fuels were named as key drivers, the conference failed to achieve consensus to keep them in the ground in any significant way, failed to commit to phase out coal or limit gasoline vehicles, failed to meet prior financial commitments of rich nations to poor (though promising to double them by 2025), and failed to establish accountability by requiring annual reports.

So it's easy to throw up our hands and say that Greta was right.

But what if we think of it this way...?

What if we think of COP26 as catalytic rather than catastrophic? That is, of course the representatives of nearly 9 billion people won't just all line up and march! And although these things take time—and we have been out of time for a decade already—the conference has catalyzed a higher level of concern and sense of urgency that promises to eclipse even the pandemic. Moreover, it has brought activated and committed people together in exponential combinations around the world. In particular, young people are angrier and more determined to act than ever. Not only has the COP moved from aspiration to accountability, but perhaps most significant of all, there is a rapidly growing recognition that governments will not be able to save us by themselves—that it will take corporations, businesses, philanthropies, and non-profits all working together if we are to save this pale blue planet that we love.

It is in the interest of all life on the planet that all of us, young and old, work toward the common good, to salvage a world worth living in for today's young people. That's the message of COP26: in the end it is up to all of us, not merely as isolated individuals, and not merely as youth, to pay attention and work together to change the systems that have brought us to this moment of peril and ultimate responsibility.

"What Can One Person Do? Stop Being One Person."

— Kathleen Dean Moore



Photo Credit: Markus Spiske, Unsplash Photos

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To join SSAFE go to [SSAFE.org](https://ssafe.org) and fill in the form on the home page.

(If the system recognizes you, continue to fill in the form, adding any missing information along the way, and submit.)

Do more! ACT when you receive an Action Alert from SSAFE, then spread the word to friends and family. Educate yourself by going to [SSAFE.org](https://ssafe.org) and look for ways to participate.

Kendal Elders in Action

ELECTRIC VEHICLES DRIVE DOWN THE CARBON FOOTPRINT

From Ben James and Hedy Knoth, Crosslands

A significant amount of energy consumed in the United States is for personal car transportation. If we are to meet the goals of the Paris Agreement—to reduce our use of fossil fuels by 50% by 2030 and 100% by 2050—we must find less carbon-emitting ways to drive. Electric cars are one of them.

There are currently 4 classes of cars and light trucks: conventional, hybrid, plug-in hybrid (PHEVs), and fully electric vehicles (EVs). Conventional vehicles use gas or diesel fuel to accelerate the car and climb hills, with the brakes handling deceleration and going down hills. The brakes throw all that energy away as heat. Hybrid vehicles, with a small battery, capture that otherwise wasted energy and apply it to the next acceleration. PHEVs have a modest-sized battery, with the ability to travel 25 to 40 miles on electricity only. They have a gas engine also, which gives the car a conventional range without recharging. EVs have a large battery and can travel 250 to 300+ miles on electricity, but they require charging to go further.

A PHEV can be charged overnight using a standard 120V outlet in 4 to 6 hours. An EV takes about 30 hours to charge using a regular outlet, but it can be charged much more quickly using a 240V outlet.

Many residents of Kendal affiliates have decided to reduce their carbon footprint by purchasing EVs or PHEVs. Fortunately, the administration at Kendal-Crosslands Communities recognizes that electric

vehicles are likely to be the wave of the future. They paid to install 240V charging stations on the Crosslands and Longwood campuses, at a total cost of \$28,000. It would have cost \$56,000, but an incentive program offered by the state of Pennsylvania paid half. Residents wanting to charge their cars in their carports can have a standard 15A receptacle installed and pay a \$20/month fee for the power for EVs and \$10/month for PHEVs.

Owners report being very happy with their purchases, saying the electric vehicles are comfortable, practical, and easy to use. And, they're a driving force in addressing climate change.



EVs: MYTH VS. FACT



MYTH: They are just too expensive.

FACT: Some are, but many now sell for about \$30,000—less with the \$7,500 government refund. And remember to factor in that they require much less maintenance, and per-mile costs are reduced.

MYTH: They are way too small.

FACT: Though not true of all EVs, the least expensive models (e.g., Mini and Smart) are too small for a family. But lots of SUVs are now available, and vans and pick-ups are either here or on the way.

MYTH: Charging is a problem.

FACT: Yes, charging stations are still few, and charging takes time. But immense federal and corporate infrastructure funding will change that fast. At this point, most people charge up overnight on a regular 120V outlet at home, and with many public charging stations already close to home, "range anxiety" is fading fast.

THE PEAK ALERT PROJECT: Saving Money and Reducing Air Pollution

From George Alexander, Kendal at Longwood

This summer, the Kendal at Longwood Energy Committee (soon joined by the corresponding committee at Crosslands) launched our “peak alert” program. Our objective was to reduce the use of the dirtiest generating plants in our region of the grid and save money.

This program came about in response to a capacity charge we noted on our communities’ joint electric bill to the tune of over \$160,000 a year. This surcharge is levied by the organization that manages our regional electrical grid (called “the PJM Interconnection”) according to how much electricity we use on the grid during peak periods. Only commercial customers (not residences) must pay this charge.

The PJM capacity charge is based on the peak-usage hour during the 5 peak-usage days of the year. These are always hot summer days, because air conditioning demand is what causes the peaks. We learned that if we could avoid using power during these peak hours, we could save a lot of money in surcharges and cause the dirtiest generators to run less.

No one knows in advance which days will be the 5 peak days. PJM figures that out retrospectively in the fall. But PJM does attempt to forecast demand 7 days ahead. We used those forecasts to determine which days were potential peaks.

Based on the records of previous years, we knew that the hour of peak demand in the PJM territory was almost always either 4:00 to 5:00 p.m. or 5:00 to 6:00 p.m., so

we set out to try to reduce our use of electricity between 4:00 and 6:00 p.m. on any day that might turn out to be one of the 5 peak days. We knew we’d need to save electricity on a dozen or more days in order to be sure of catching all 5 peak days.

We reached out to residents using a Zoom presentation, the website, posters, and mailbox notices. We also set up a table to solicit email addresses for an alert list; over 150 people signed up.

When potential peak days came along, we sent notices to the email list and posted a message on the website. We put up lawn signs in central locations where people would see them.



Kathleen Gordon and Don Overton sign up participants.

Ultimately, we designated 13 days as “peak alert” days. On those days, we asked residents to “pre-cool” their residences before 4:00, then turn off their A/C until 6:00. We asked them not to cook or use hot water during that time.

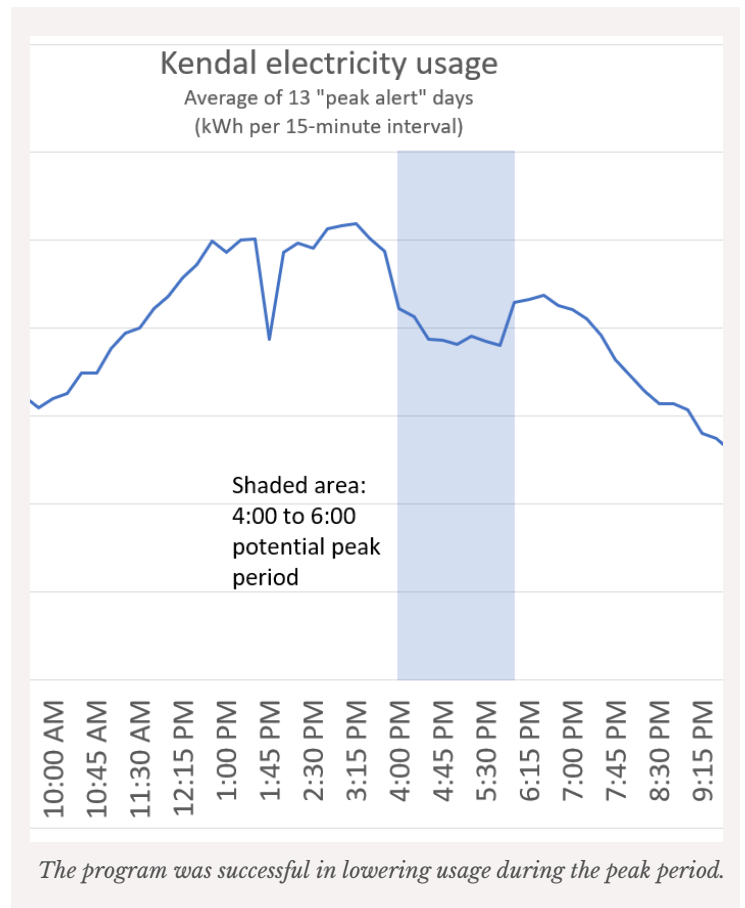
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THE PEAK ALERT PROJECT (cont'd)

We were able to pick the right days! PJM posts on its website the hour-by-hour details of past electrical demand on PJM's region of the grid.

Based on that data it is clear that the top 5 days were (in descending order) August 24, August 12, June 29, July 6, and August 26. All of these were among our 13 "peak alert" days. Our average electrical usage during the peak alert periods on all 13 peak alert days dropped off dramatically, indicating we were successful in saving electricity.

Those days weren't necessarily our hottest days, and they weren't necessarily the days we used the most electricity. For PJM, the important issue is electrical demand for the region as a whole; they charge us according to our use during regional peaks, not local ones.



It remains to be seen how much we saved, in electricity use during the peak period and in dollars. We're working on that.

We're calculating a percentage savings by comparing our actual demand versus our typical demand without the program and by watching for PJM to post its capacity charge for 2022. Based on the percentage we saved, and the PJM fee, we'll be able to figure out approximately how much money our peak-alert program saved.

We residents are proud to know that our participation had such a significant effect. The program was an opportunity for all of us to come together to work on something that helps both our organization and the environment, and we rose to the occasion.

PEAK DAY ALERT!

Tuesday is a potential grid peak day.

Please do the following if you can:

- **Pre-cool your cottage** by turning the thermostat down a couple of degrees around 2:30. Turn it back up at 4:00
- **Minimize use of electricity** (especially your stove, dryer, dishwasher and toaster) from 4-6 p.m.
- **Minimize use of hot water** from 4-6 p.m.
- **Don't charge electric vehicles**

Thanks! Your participation helps Kendal and the environment.

Kendal Energy Committee

REDUCING THE CARBON FOOTPRINT THROUGH DIET

From Lyn Back, Crosslands

One Crosslands resident had an eye-opening discovery when he decided to determine his personal carbon footprint using an online calculator developed by the University of California-Berkeley. He found out that by reducing his beef consumption from 3 days a week to 2, his carbon footprint dropped significantly.



Compared to plant-based foods and even other meats, beef is far and away the worst culprit in dietary causes of global warming. Cows emit methane, a highly damaging greenhouse gas. In addition, the cost of growing feed for them, providing large amounts of land on which to graze them, producing beef from them, and then transporting it is unsustainably high in terms of tons of carbon dioxide generated.

As a result, an EAT LESS BEEF campaign was initiated by the Climate Sustainability Working Group (CSWG) at Crosslands in July, 2021. I volunteered to investigate how people at Crosslands feel about cutting down on their beef intake.

I contacted 25 people and asked them if they would be willing to join me in an experiment to not only eat less beef, but also to advertise our intent by wearing an EAT LESS BEEF button. I got 25 positive responses. Soon EAT LESS BEEF campaign buttons began to appear on campus. Word spread to our sister campus, Kendal at Longwood, whose Energy Committee ordered 20 campaign buttons, and I ordered another 30!

Our Director of Culinary Services was informed of the campaign and remarked that beef is the single most expensive item on his food budget. The head of the Food Advisory Committee at Crosslands was also informed and invited members of the CSWG to attend their next meeting.



EAT LESS BEEF button worn by residents.

Buttons are available at <http://www.wackybuttons.com> for \$1.00 each. You can even design your own button there. It's a great way to have fun and be kind to the planet.

REDUCING THE CARBON FOOTPRINT THROUGH HYDROPONICS

From Gina Bosworth, Kendal at Longwood



Hydroponics is a method of growing crops that is centuries-old, yet many people are unfamiliar with the term. Simply put, it is a way to grow plants without soil, applying nutrient-infused water to the roots and using artificial grow lights. It's ideal for growing crops like herbs, lettuce, and greens indoors throughout the year. In recent times, it has grown commercially and is seen as an environmentally sustainable way to feed people.

Hydroponics offers several advantages: no messy dirt or soil infestations, few destructive insects, and year-round growth and production. It can also present some challenges, though. The lighting can be expensive and require a backup generator. Moreover, a hydroponic system requires monitoring and maintenance.

So how did Kendal at Longwood (KAL) meet these challenges?

This is a success story that involves intensive research and planning, acquiring space for setup, and obtaining funding for equipment and supplies.

In the fall of 2019, an Energy Committee was formed to pursue a zero-carbon

footprint at KAL and Crosslands by 2050. We hatched a plan for a model hydroponic farm, began an initial study, and researched space within the center. We had planned to visit a nearby hydroponic operation in a retirement center similar to KAL, but then Covid-19 hit in February of 2020.

For the next year, I led a smaller working group, reporting to the Energy Committee. We continued studying and searching for space, learning as we went. By the end of 2020, we found a location on the lower level of the Center.



The current hydroponics operation at Kendal at Longwood.

Our goal was to study the process, exploring the possibility of building a larger space to house a hydroponic operation that could supply more of the vegetables required by the Culinary Department at KAL and Crosslands. We approached the Director of the KAL/Crosslands Culinary Department to ask for his support.

His response? With food and produce prices soaring, he would love to see KAL/Crosslands develop long-term plans for a facility that would grow as many vegetables as possible.

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REDUCING THE CARBON FOOTPRINT THROUGH HYDROPONICS (cont'd)

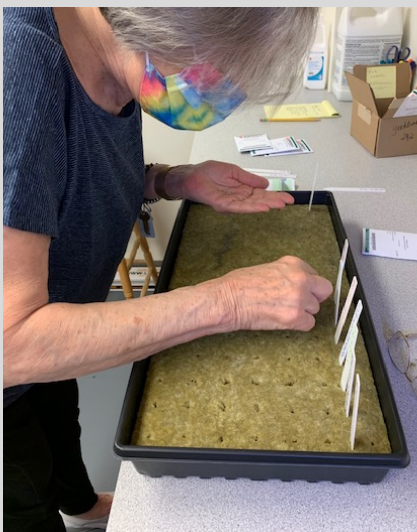
Not only would it provide fresh produce year-round, but also it would give Culinary Services more control over supply and budget. A plan for a small model farm was formed. The estimated cost was \$2,000. Importantly, we were able to secure financial backing from a discretionary fund the Director can turn to for such needs. It was decided by the Director and a resident that the first seeds to germinate would be leafy greens and herbs.

We faced delays in procuring the right equipment, but by the spring of 2021, we planted our first seeds in 10" x 20" x 1" rock wool pads under lights for 1-2 weeks, depending on the seed. By the end of the summer, we were ready to transfer our first seedlings into 4" x 4" plastic pots, which were then put into plant bins for 4-6 weeks. There, they are maturing under 14 hours of light daily, growing roots in circulating nutrient water.

The results are exciting—and promising! We have harvested greens twice, which Culinary Services used for garnishes. The size of the bins restricts growing in large enough quantities to fill our salad bar, but the greens and herbs have been featured on the salad bar as items that could be added to a salad.

The crux of this pilot study is to see if we can reduce our carbon footprint. Hydroponics eliminates the need for heavy carbon-producing farm equipment, environmentally damaging pesticides and fertilizers, excessive and destructive packaging, and carbon-producing transportation for long-distance delivery. As we gain experience with our model system, we can better decide if creating a more extensive, fully equipped hydroponics farm would make an even greater contribution to our community—and to our country.

Kendal at Longwood Hydroponics Photos



Marilyn van Renterghem planting seeds.



Seedlings under grow lights.



The goal: to use the greens in the dining hall.

BOOK REVIEW

From William Schellstede, Kendal at Lexington

Blowout: Corrupted Democracy, Rogue State Russia, and the Richest, Most Destructive Industry on Earth

By Rachel Maddow

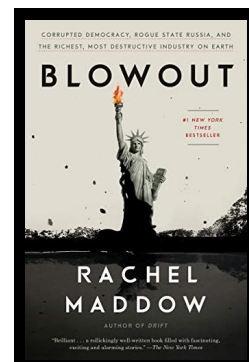
Most scientists and generally well-informed observers agree that the massive increase in greenhouse gases relates directly to the fact of global warming. That fact leads to its corollary that the burning of fossil fuels is the source of most of such gases, especially that of carbon dioxide. Further, and necessarily, fossil fuels are the lucrative product of the oil and gas industry. Maddow's book is a carefully researched and sometimes highly entertaining examination of the industry in all its follies and iniquities.

Following WWII, Atoms for Peace was a US government program designed to develop applications of nuclear power for peaceful pursuits. Ironically, perhaps, it led to a collaboration between the Atomic Energy Commission and the Austral Oil Company to begin to exploit natural gas trapped in shale in Western Colorado.

The idea was to detonate a 33-megaton atomic bomb thousands of feet deep to launch an entirely new way to release natural gas from the grasp of the surrounding shale. They called it “nuclear stimulation”—maybe the first instance of “fracking.” The final report was ebullient in its description of the project, glossing over at least three salient points: a

mechanical failure prevented them from measuring the obvious contamination of the area with krypton-85 and tritium; the considerable quantity of gas released was itself also dangerously radioactive; and the \$82 million cost of the exercise, when projected over the area for possible application, rendered it simply not feasible.

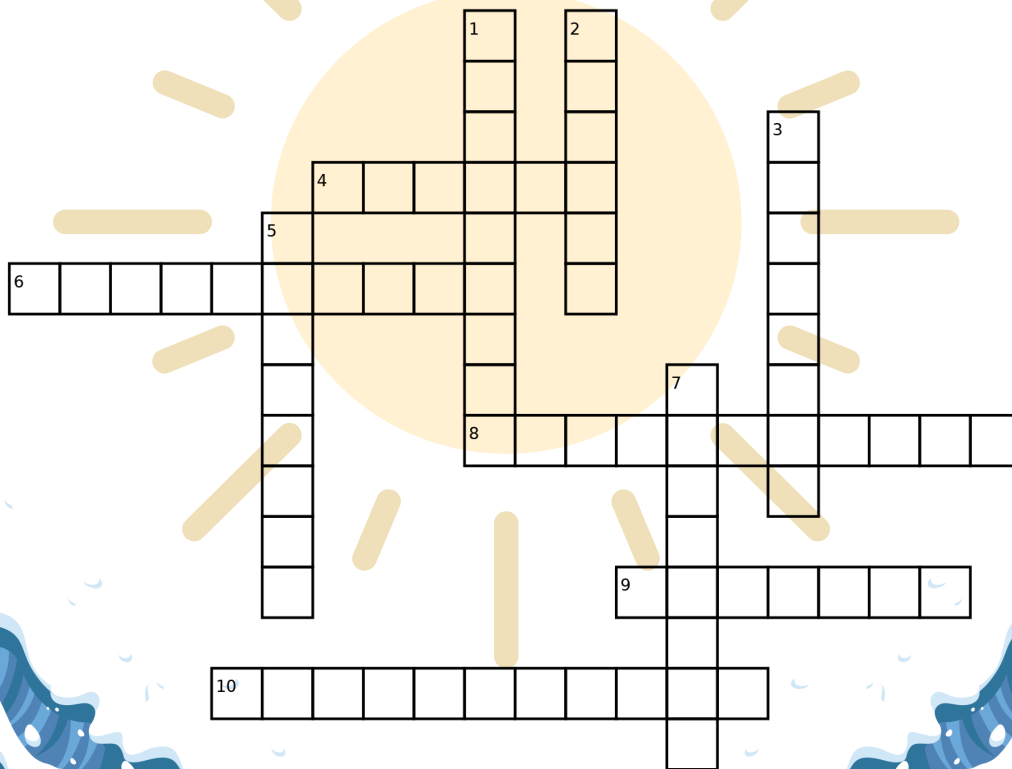
This example of a single episode in Maddow's tale is offered as temptation for the whole book. From the egregious behavior of the oil-rich Equatorial Guinea president's son, to Putin's putting the entire Russian economy on the back of its troubled petroleum industry; from the seeming caricature of the *nouveau riche* in her picture of the fracking titans, to the oily machinations of Rex Tillerson; from Oklahoma's “earthquake swarms,” to seventeen cows suddenly dead only hours after exposure to effluent from a fracking site in Louisiana—it's all here. Billions and billions of dollars in profits have been made from our march to climate disaster. Maddow says it's not relevant, though it is tempting, to assign blame to ExxonMobil and other fossil fuel companies. Like the lion that killed the gazelle, it's just what they do.



Puzzle for the Planet

From Ruth Crawford, Managing Editor
Cartmel at Kendal-Crosslands Communities

The Most Climate Vulnerable Countries (V20)



Down:

1. Central America's eco-haven.
2. Great place to do gorilla trekking.
3. Home of the Serengeti.
5. Independent island country in the Lesser Antilles.
7. Indian Ocean island chain whose highest point is 8 feet above sea level.

Across:

4. "Gross National Happiness" guides their development.
6. Over 30 species of lemurs live there.
8. Troubled tribal nation sitting on \$1 trillion in rare earth elements.
9. Rice paddies and French colonialism.
10. Southeast Asian archipelago, 7,000 islands, Euro-American leanings.

Can you guess the other 10 countries?

Answers are on the next page - don't peek!

Wrapping Up

Ideas for Sharing this Newsletter

Word of mouth: Say "Go to SSAFE.org/newsletter to get a copy!"

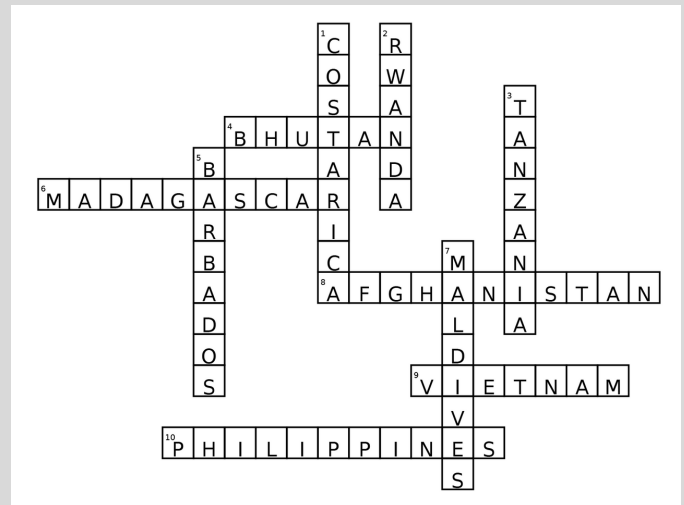
Email: Forward the SSAFE Newsletter email or write an email with the URL to the newsletter and send it to your friends and family!

Print: The PDF file found at SSAFE.org/newsletter is print-ready.

Order Online: Go to SSAFE.org/newsletter and follow the link to 9 Cent Color Copies.

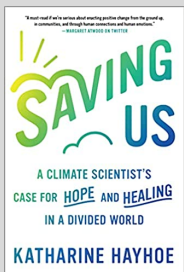
Bulletin Board/Library: Print a copy and post it to your community bulletin board or put a copy in a 3-ring binder and give it to your librarian.

Answers to Crossword Puzzle



Bangladesh, Ethiopia, Ghana, Kenya, Kiribati, Nepal, Saint Lucia, Timor-Leste, Tuvalu, Vanuatu.

NEW! SSAFE Book Club



Kendal residents are invited to meet on the last Wednesday of each month on Zoom to discuss the quarterly book selection. Learn more at SSAFE.org/book-club

Not a Kendal resident? Start your own club, see our book suggestions on SSAFE.org.

Kendal Corporation Strengthens its Climate Commitment

"In alignment with our Quaker-inspired values, we believe human beings are stewards of the earth and should protect and preserve it for future generations. As environmental threats to the planet become more visible and increase in depth and breadth, the pursuit of sustainable initiatives has evolved into a moral and imperative action for the organization. Kendal's commitment to combating climate change recognizes the collective effort of many individuals and organizations. When we all take small steps to change the here and the now, we can ultimately design a better world for our children and grandchildren."

SSAFE Newsletter

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Submissions & Comments

We want your feedback! We're always looking for good stories to provide inspiration to other senior living community residents. Send us your articles, ideas, questions or comments!

We'd love to hear from you —drop us an email at info@SSAFE.org