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## **The World's Nations Make Little Progress against the Climate Crisis**

**By Nancy F. Parks**

Long term climate changes and disruptions, with a result of our current climate crisis, are a problem of our own making. It is ours to solve.

COP-26 was hosted by the UK and Italy from October 31 to November 12 in Glasgow, Scotland. 'COP' is the 'Conference of the Parties', an annual summit – this is the 26<sup>th</sup> meeting in the last three decades - attended by the countries that signed the 1994 [United Nations Framework Convention on Climate Change \(UNFCCC\)](#). There were 30,000 delegates from 197 countries.

Incredibly complex and inter-woven among all nations and cultures, it has taken three decades for the nations and cultures of the world to come to grips with the breath of the danger from our

love affair with fossil fuels. They are just beginning now to forge messages of solution and accountability.

COP-26 has results that can help to ameliorate but not solve our worst climate and habitat issues. Two of most persistent problems are how to craft an emissions trading program internationally, across the world without double counting emissions, and how to guarantee grants to smaller nations and cultures to ameliorate "loss and damage". A third is how to make our first world-wide emission reduction plan enforceable.

130 countries have pledged to reach zero carbon fifty years from now. India pledges net zero by 2070. BUT as our mighty young hero Greta Thunberg said at COP 26 "... blah, blah, blah ..." and she knows it when she hears it. Greta Thunberg will be reaching 70 plus years when India's final goal rolls around in 2070.

Vanessa Nakata of Uganda and Nisheen Elsaid of Sudan implored us to succeed. Nakata (youth4climate.com and speaking at pre-COP-26 meeting) described how 86 million people will be displaced in Sub-Saharan Africa. With the island of Madagascar - where my own father visited during WWII - already suffering from food insecurity due to prolonged drought, Nakata asks who will pay to feed these people and describes loss and damage everywhere; with lost culture, lost art, lost history and even lost leaders. Elsaid spoke of the 47% of the Sudanese population already affected by climate disruption.

Previously, \$100 billion per year was promised within the 2019 COP meeting to go to nations and

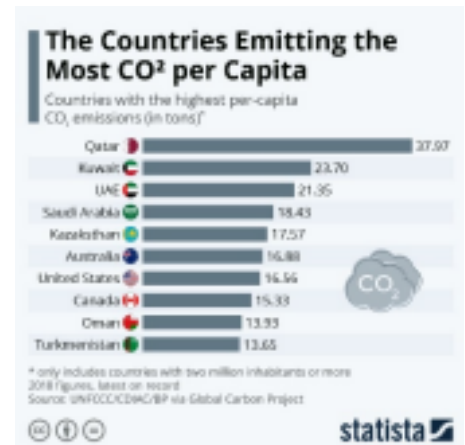
cultures disproportionately affected by fossil fuel usage - by the larger nations of the USA, China, Russia and India - to help cover current damages. But only Scotland has contributed to that fund. Nakata asked for large countries to contribute, and for grants to smaller countries and not loans that must be paid back.

David Attenborough spoke eloquently of how this moment in time defines our human history and our relationship with our world habitat. For many thousands of years, Earth's weather was unstable, until 10,000 years ago when weather and temperature stabilized, allowing humans to form our history and our cultures. We are unstable again and it's our fault. Attenborough sees humanity as the greatest problem solvers on Earth; we must re-write our history. We can all share in the benefits of new renewable and sustainable industry if we restore the wild and return balance.

### What do we need?

As of November 2021 the world has warmed by global average of 1.1 degree Centigrade (that's 1.98 degrees Fahrenheit). The IPCC - the Intergovernmental Panel on Climate Change - warns that all the world's cultures must cut carbon emissions by 50% by 2030. We are not there. We need interim goals for 2030, 2040 and 2050. **These carbon reduction steps must be permanent, verifiable, quantifiable, measurable and enforceable.** These principles are

used in reducing air pollution in Pennsylvania and the USA under the Clean Air Act. And supported by Sierra Club. We must use "off the shelf" technologies and



practices, that are proven to work now. Carbon sequestration doesn't work now; perhaps someday it will, but we can't depend on it and we can't wait for it.

increases due to carbon pollution is still viable says Grenada's Minister of Climate Resilience, but we must not just pledge for the future, but commit and accomplish this goal immediately. This COP-26 pact will commit countries to return to the table in Egypt in 2022, with detailed plans and actual carbon reduction commitments for 2030 and 2050. **Fossil fuels must be targeted and each country must have a required carbon emission inventory by 2024.**

20 countries emit 80% of the current carbon burden says former Senator John Kerry, U.S. envoy to the COP-26 and there must be a commitment to a "common but differentiated responsibility". The USA, China, Russia and India have a greater responsibility, says Kerry with their greater use of fossil fuels.

To reach a **cap of 1.5 degrees Centigrade** (2.7 degrees Fahrenheit) increase over the pre-industrial average global temperature, we must:

- Phase out all coal production and use by 2050;
- Create an international carbon emission trading program;
- Have fossil fuel usage countries must pay monies to smaller nations to repair and ameliorate loss and damage that has already occurred;
- Stop all human initiated methane emissions globally by 2050;
- End deforestation by 2030; and • Make COP-26 commitments and plans globally enforceable.

The complexity of the COP-26 endeavor was highlight by the number of side deals made between participating countries, such as those promising to phase out coal extraction and financing in some nations, while allowing other nations to indefinitely continue oil and gas extraction.

## VOTE for the Moshannon Group Executive Committee

There are 7 members of the Excom who serve YOU for a 2-year term. Each year, three or four terms expire. This year, there are three positions open and four candidates. Here is a brief biography/statement of each candidate.

### Ernest Boyd

Greetings Moshannon Group members. I have served on the Executive Committee for ten years. I have filled a variety of roles including as chair for five years. Now I have transferred from chair to table and have organized our tabling events for many years. However, the pandemic had halted all in person tabling events. Recently we have restarted. Tabling is satisfying. We can meet people and make them aware of the many threats to the planet. Plastics, for example, have become the most harmful curse to wildlife and to us. Recently while tabling, we have included a "I Choose to Reduce the Use of Plastic" pledge that educates people about the detrimental effects of plastic that includes single use grocery bags, plastic straws, plastic water bottles, and plastic take out containers. Tabling is also uplifting. Often young people come to our table to learn what we have to share about environmental issues. So many young people, just like Greta Thunberg, express a profound desire to confront environmental issues. While tabling at the Crickfest Festival and conversing with a grade school student, she looked up at me earnestly and asked, "Why can't we save the planet?!" I have found it inspirational to work with the dedicated Moshannon Executive Committee. They work for air quality, water quality, social justice, and a greener planet. Your vote will insure that I can continue to work with this great Board, and serve the group with Ernest zeal.

### Deborah Escalet

Deborah Escalet is devoted to protecting the earth's natural ecosystems by educating others

About biodiversity loss and  
**Candidates (cont'd)**

sustainability issues. She earned a B.A. Environmental Studies, and is currently employed at Penn State University. She volunteers in several citizen science projects including Juniata Valley Audubon Society, Shaver's Creek Environmental Center at Penn State University, Cornell University's Laboratory of Ornithology and Elephant Listening Project.

She has been a member of Sierra Club in the past for many years renewing in 2019. Originally from suburban Philadelphia, she currently lives in State College, PA.

### Ellen Foreman

As an avid hiker, biker, and skier, I am a 30-year member of the Sierra Club with its mission to *explore, enjoy, and protect the planet*. I have long worked on sustainability and climate initiatives as part of my career, but like many of you, I felt a strong sense of urgency to act after the 2016 presidential election when the very pillars of our environmental safeguards began crumbling.

My job directing outreach programs for ICMA, an international organization dedicated to good local government, required that I be in Washington, D.C. part-time until this past year. Since then, I have been volunteering with the Sierra Club's Moshannon Group. I lead the group's Ready for 100 Team and helped organize the recent Student Climate Action Day. I join the monthly Executive Committee's calls, am very much in alignment with the priorities of the group and admire the expertise they bring to the region's challenges.

I have an undergraduate degree in journalism from Duquesne University, an MBA from the University of Pittsburgh, and a career which has allowed me to travel globally. I feel most privileged to be living in this area where opportunities for pursuing outdoor passions are easily accessible and

plentiful. I would welcome the opportunity to serve your interests on the Executive Committee in fulfilling the Sierra Club mission.

**Steven Lachman**

Education: Ph.D. in Geography from

Prior – Writing, Penn State

## Community Groups Make Climate

Dickinson School Assistant Professor of Legal of Law; private attorney; attorney for Pennsylvania Dept. of Environmental Protection; attorney for Allegheny County Office of the Public Defender.

Sierra Club Experience: Member of Moshannon Group Executive Committee 2010-present; Membership Chair 2009-present; Newsletter Editor 2021 (current); Outings Leader, Service Trip Subcommittee 1987-2019; Member of Allegheny Group Executive Committee 1992-1997 (including serving as Acting Chair in 1996).

Position Statement: Catastrophic climate change is the single most important issue facing us, but we live in a region largely represented by legislators who deny or ignore the issue. We must hold them accountable and put the issue front and center in the public consciousness. On the Executive Committee, I tend to be fiscally conservative because we have a fiduciary duty to ensure that your membership dollars are used only to meaningfully support the environment. The leadership of the Moshannon Group is based primarily in Centre County, but since the Group's jurisdiction extends from the New York to Maryland borders, we have a responsibility to do greater outreach outside of Centre County.

Penn State University; J.D. from Vermont Law School; B.A. from Vassar College.

Employment: Current – Magisterial

"increase bike usage." One participant



## Climate Action Day a Success

By Kelly Forest and Ellen Foreman

The Sierra Club Moshannon's Ready for 100 group and the Penn State's Eco-Action club sponsored their first Climate Action Day on Penn State's campus on October 2017. The afternoon was filled with students, parents, and friends visiting tables sponsored by the State College Sunrise group, Penn State Sustainability Institute, Eco Reps, UPUA Sustainability, Eco-Action, Centre Bikes, The Citizens Climate Lobby, Penn Environment, PA Interfaith Power & Light, SPIN Bikes, the Nittany Valley Environmental Coalition, and the Sierra Club. There was also a special transportation station which solicited "votes" on what participants would like to see happen in the Centre Region to mitigate climate effects from transportation.

District Judge, State College, PA.

## Students and Com

shared their climate actions. The most frequent climate action suggested to



Students get engaged at Climate Action Day.

Some of the climate actions and demonstrations included: making the best food choices for the planet, recognizing the climate impact of transportation and what options are available, engaging in tree planting, identifying invasive species, how to talk to other students about sustainable practices, test-riding an e-bike as an alternative to driving a car or even taking the bus, and pledging to stop single-use plastic. Participants who visited all 12 stations received a tiny plant for their dorm rooms and they said her climate action was to "teach others how to make their voices heard."

## Update on PFAS

You may remember from our previous newsletter, that PFAS (Polyfluoroalkyl chemicals) appear to be leaching from the University Park Airport. Sadly, University Park Airport Director Brian Rodgers, in a November 8 letter, said that the airport plans to continue fluorinated fire-fighting foam and intends to continue testing it at the airport. Mr. Rodgers made no commitment to preventing it from reaching surface and ground waters.

Moshannon Group Excom Member **Dave Roberts**, will give testimony about the issue to the Spring Creek Watershed Commission on January 19<sup>th</sup>. If you want information about the meeting or want to share your concerns, contact Dave at [puzzlewuzzle.dr@gmail.com](mailto:puzzlewuzzle.dr@gmail.com)

## Thank You, Pam Steckler!

The Moshannon Group warmly thanks member Pam Steckler for

authoring a resolution that passed unanimously on November 1 Moshannon Group Chair Doug



**Mason congratulates Pam Steckler (nice Woodstock t-shirt, Doug!).**

that committed Ferguson Township to regulating single-use plastic bags and straws.

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**MOSHANNON GROUP ELECTION BALLOT** Vote by placing a checkmark next to up to 3 Excom candidates. If you have a family membership, each member may each enter a separate checkmark. Ballots must be **received no later than January 4, 2022** at the following address: Elections, Sierra Club, P.O. Box 513, State College, PA 16804

\_\_\_\_\_ Ernest Boyd \_\_\_\_\_ Deborah Escalet \_\_\_\_\_ Ellen Foreman \_\_\_\_\_ Steven Lachman

*Thank you for voting!!!*



What's  
In  
Your  
Book  
Case  
???

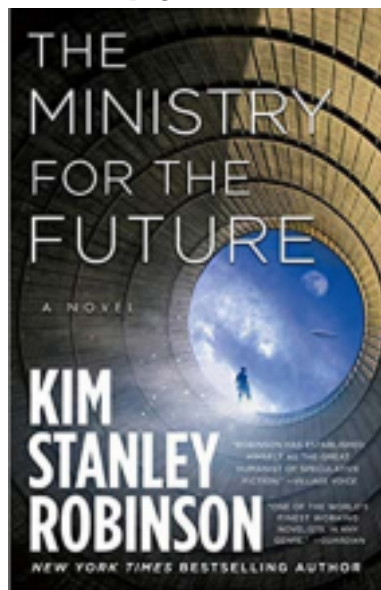
## 2 Book Reviews

novels that take place in the near future and focus on humans' attempts to address the current climate catastrophe.

### *Ministry for the Future*

By Kim Stanley Robinson  
Published by Orbit

Books 576 pages



means of dealing with climate change just aren't good enough. Survival is at stake, and she needs to push the envelope.

As the book evolves, Mary explores all the possible routes to human salvation. She receives help from a covert guerilla group that does things like blowing up passenger planes to discourage jet air travel. And

she uses the bully pulpit and a lot of arm-twisting to persuade national banks, the International Monetary Fund, and the World Trade Organization to use monetary policy to shift to a non-carbon-based economy. *Ministry* is both brilliant and flawed. It is brilliant in its integration of climate science, economics, biology, physics, and political science into a thoughtful vehicle to explore

**By Steve Lachman**

I grew up as an avid science fiction reader. I plowed through Isaac Asimov's and Robert Heinlein's works. Their books were based in science, but the science was really just a veneer over the stories. As science fiction readers have become more sophisticated, some contemporary authors – I'll name Stephen Baxter, Neal Stephenson, and Kim Stanley Robinson as examples – have moved science front and center, to create more plausible and intricate plots. This type of literature is sometimes called "hard science fiction."

Why am I waxing poetic about science fiction in an environmental newsletter? Because recently both Robinson (2020) and Stephenson (2021) have released science fiction

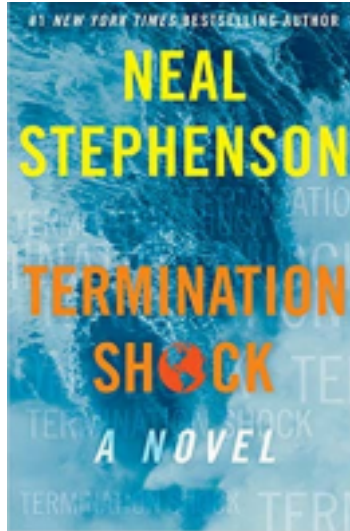
*Ministry for the Future* begins in 2025 with a climate catastrophe in India that kills millions of people. It then follows the lives of two protagonists over the next 20 years: American Frank May, a survivor of the Indian disaster, and Mary Murphy, an Irishwoman appointed to direct the new United Nations agency called the Ministry for the Future, which is supposed to solve the climate crisis, but is denied the resources to be effective. Frank, who is mentally scarred from his near death experience, drives the point home to Mary that conventional what we must do as a society to forestall impending doom. Ultimately, the book is optimistic and utopian. Robinson's organization and writing are flawed. He doesn't spend enough time on Mary and Frank to make us love them. And interspersing the book with so many asides on scientific and social issues makes the storytelling choppy. Still, the scope and vision of *Ministry of the Future* are breathtaking. It will give you plenty to think about and will inspire you to take action - because conventional means of addressing climate change are no longer good enough. That's the clear message of the California wildfires and this summer's heatwave. We must push the envelope.

### ***Termination Shock***

By Neal Stephenson

Published by William Morrow  
720 pages

*Termination Shock* does not aspire to be a primer on climate change. Neal Stephenson's objective, largely



successful, was to write an enjoyable novel – set about ten years future – with climate change serving as the moving force for the plot and its characters. While the background science is important, this book is less complex than Stephenson's earlier novels.

Main characters include T.R., a stereotypical bigger than life Texas billionaire, Saskia, who is the queen of the Netherlands, Rufus (aka "Red"), a mixed-blood Comanche whose Moby Dick is a vicious wild boar named Snout, and Laks, a Canadian Sikh who masters the gatka stick-fighting martial art. The story revolves around T.R.'s efforts to diminish global warming by shooting sulfur into the stratosphere where it will reflect sunlight. This form of geoengineering generates climatic winners and losers.

The ensuing geopolitical conflict fuels the plot, as different nations and individuals ruthlessly compete to promote or block the project. Stephenson envisions a world where the United States has lost much of its clout, and China and India take a larger role on the world stage. Much of the action occurs in Texas, but the Netherlands, India, and Papua are also sites of conflict.

The title, *Termination Shock*, is a bit of a misnomer. That term refers to the unpredicted consequences when a course of action is stopped. Imagine what might happen if a cancer medicine were discontinued. Only, in this case, the reference is to unintended climate consequences if T.R.'s proposed sulfur launches were suddenly ceased. However, the concept ends up being unimportant to the story - I guess Stephenson or the publisher just thought it was a catchy name.

Let me make a 90° turn here and talk about emotions. Having now read four Kim Stanley Robinson novels and four Neal Stephenson novels, I know that both men are brilliant. And yet, character development is not their strong suit. Their scientific IQs outstrip their emotional IQs. Their characters tend to be a little wooden. In *Termination Shock*, Stephenson does a good job of creating likeable and intriguing characters that hold our interest. But even these characters are so darn rational

that they lack the full emotional range. And by assigning third-person storytelling to multiple characters, he limits our investment in any single character.

As I said earlier, Stephenson focuses more on storytelling than on climate science. Atmospheric sulfur injection is currently being seriously proposed by

scientists, but Stephenson doesn't devote much attention to its possible downsides – particularly the creation of acid rain. He does suggest that if sulfur injection reduces global temperatures, humans may lose the incentive to reduce carbon emissions. In the book, billionaire T.R. has a shoot first, ask questions later approach. Hopefully, nations will be more circumspect in the real world.

*the Future*, you can't help but confront our world's dire climate predicament and ponder the solutions. But reading *Termination Shock*, you can just sit back and enjoy an intelligently written and suspenseful story.

Reviewer's Grade: *Ministry* gets a B, *Termination* a B+.

When reading *Ministry for*

## *An Environmental Directory*

The Moshannon Group has assembled a list of Central PA environmental organizations. If you want to get involved in a specific issue locally, here is useful contact information.

([apk5656@psu.edu](mailto:apk5656@psu.edu))

Juniata Valley Audubon Society: Laura Jackson  
([mljackson2@icloud.com](mailto:mljackson2@icloud.com))

Keystone Elk Country Alliance: Rawley Cogan  
([experienceelkcountry.com](http://experienceelkcountry.com))

Moshannon Creek Watershed Association: Eric Skrivseth  
or Eric Rosengran ([membership@moshannoncreek.org](mailto:membership@moshannoncreek.org))

Mount Nittany Conservancy: Tom Shakely  
PA Interfaith Power & Light: Greg Williams  
([wacmbook@aol.com](mailto:wacmbook@aol.com))

PA Native Plant Society: Sarah Chamberlain  
([sjchamberlain8@gmail.com](mailto:sjchamberlain8@gmail.com))

PASA Sustainable Agriculture: Kristin Hoy  
([info@pasafarming.org](mailto:info@pasafarming.org))

Penn State Sustainability Institute: Peter Boger  
([pgb45@psu.edu](mailto:pgb45@psu.edu))

Penn's Valley Conservation Association : Katherine Alden  
([aldenkat@gmail.com](mailto:aldenkat@gmail.com))

Pennsylvania Environmental Council: Helena Kotala  
(<https://pecpa.org>)

Save the Allegheny: Laurie Barr  
([lauriebarr59@yahoo.com](mailto:lauriebarr59@yahoo.com))

American Chestnut Foundation PA Chapter: Jean Najjar  
([jnajjar29@gmail.com](mailto:jnajjar29@gmail.com))

Centre County Farmland Trust: Dan Guss  
([danguss@comcast.net](mailto:danguss@comcast.net))

Centre County Green Business Partners: Amy Schirf  
([aschirf@centrecountyrecycles.org](mailto:aschirf@centrecountyrecycles.org))

Centre County Green Party: Neil Haagen  
([pgofgp@gmail.com](mailto:pgofgp@gmail.com))

Centre County Pennsylvania Senior Environmental Corps:  
Susan Sapp (<https://ccpasec.org>)

Centre Wildlife Care: Robyn Graboski  
([centrewildlifecare@gmail.com](mailto:centrewildlifecare@gmail.com))

Citizens Climate Lobby of State College: Sylvia Neely  
([sneelypa@gmail.com](mailto:sneelypa@gmail.com))

ClearWater Conservancy : Deborah Nardone  
([deb@clearwaterconservancy.org](mailto:deb@clearwaterconservancy.org))

Coalition for Environmental Change: Micaela Amateau  
Amato ([mx17@psu.edu](mailto:mx17@psu.edu))

Coalition to Protect Hawk's Peninsula: George Conrad III  
([gconrad3.16652@gmail.com](mailto:gconrad3.16652@gmail.com))

EcoAction of Penn State: Abbey Kollar



Sierra Club Moshannon Group: Doug Mason  
([ramakong1@gmail.com](mailto:ramakong1@gmail.com))

Spring Creek Watershed Atlas: Bob Carline ([m  
bcarline@comcast.net](mailto:bcarline@comcast.net))

State College Bird Club: Doug Wentzel  
(<https://scbirdcl.org>)

Sunrise Movement State College Chapter: Abbie LaPorta  
([abby.laporta3@gmail.com](mailto:abby.laporta3@gmail.com))

Trout Unlimited Spring Creek Chapter: Robert Vierck  
([rvierck@gmail.com](mailto:rvierck@gmail.com))

West Branch Susquehanna Restoration Coalition: Amy  
Wolfe (<https://www.wbsrc.org>)

Wildlife for Everyone Foundation: Barbara Schroeder  
([info@wildlifeforeveryone.org](mailto:info@wildlifeforeveryone.org))

Wildlife in Need: Sue DeArment  
(<https://nittany.org>)

Nittany Valley Environmental Coalition: Dorothy  
Blair ([dorothyablair@gmail.com](mailto:dorothyablair@gmail.com))  
([sdearment@windstream.net](mailto:sdearment@windstream.net))

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<b>Outings</b>	<b>Kat Alden</b>	<b>814 404-2165</b>	<b>aldenkat@gmail.com</b>
<b>Outings</b>	<b>Kevin Abbott</b>	<b>814 769-3644</b>	<b>kevingabbott@comcast.net</b>



<b>Ready for 100</b>	<b>Ellen Foreman</b>	<b>240 418-9721</b>	<b>esforeman@yahoo.com</b>
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\* Indicates Executive Committee Members

[www.sierraclub.org/pennsylvania/moshannon](http://www.sierraclub.org/pennsylvania/moshannon)