



NET ZERO NEWS



LWV, Piedmont Connect co-host talk on sustainability of textiles

By Hope Salzer

Rebecca Burgess was the guest speaker in the Climate Speaker Series on Wednesday, October 19, presented jointly by Piedmont Connect and the League of Women Voters of Piedmont. Her informative talk focused on the sustainability and future of textiles.

Burgess is Executive Director of Fibershed, an organization that invests in regenerative agricultural research and practices and advises on regional sustainable fiber production systems. Burgess explained that approximately 60% of wardrobes in developed nations consist of textiles made from fossilized carbon, also called synthetic fibers.

These fibers include acrylic, nylon, capilene, polyester and their synthetic dyes and finishing agents which are also derived from fossil sources. To stem climate disruption, Burgess advised the first step residents of wealthier nations can take is to wear clothes made of 100% natural fibers such as cotton, linen, hemp, silk and animal wools.

According to the Intergovernmental Panel on Climate Change IPCC, land-use activities like agriculture and forestry currently account for 23% of total net human greenhouse gas emissions.

Research by Dr. Rattan Lal and other top soil scientists, esti-



Rebecca Burgess was the guest speaker in a climate discussion sponsored by Piedmont Connect and the League of Women Voters on October 19.

mates that activating the agriculture and forestry industries in drawing-down emissions could return our atmospheric carbon concentrations to pre-industrial levels by 2100— from the current 415ppm CO₂ to 263ppm.

Burgess championed the extended use of garments and household textiles like bedding, table linens, window coverings, and upholstery.

Fossil fuels are also burned while laundering the garment by washing in cold water, line-drying, and choosing fibers which are naturally antimicrobial, like wools, and can be worn many more times between washings, consumers can reduce

their personal textile fossil footprints.

Burgess pointed out that 80% of the clothes are seldom worn.

“Textile industries become unsustainable mainly due to high consumption levels. When we reduce our consumption rate, existing fiber systems are less compelled to mine— soil, labor, and fossilized carbon, extractively and exploitatively,” she said.

Asked whether there were clothing or textile brands to look for or avoid, Burgess suggested avoiding volume-based, fast-fashion businesses like Shein, H&M, and Zara. She recommended smaller, climate-conscious fashion labels such as Coyuchi (based in Marin County), Mara Hoffman (NYC), and Veja (Brazil) for athletic shoes.

To learn more about the history of U.S. soil conservation efforts, the basic science involved in soil-based carbon sequestration, watch Burgess’ entire talk on LWV Piedmont’s YouTube channel at: [Youtube.com/watch?v=J1sh0-9BkLM](https://www.youtube.com/watch?v=J1sh0-9BkLM).

Net Zero News is offered by Piedmont Connect, Piedmont’s environmental education and advocacy [501c3] organization. To be part of the solution, visit [Piedmontconnect.org](https://www.piedmontconnect.org) to learn more and get involved.

Hope Salzer is a member of Piedmont Connect

VIEWPOINT

Cooling the Planet

By Tom Reicher

Editor:

In last week’s Viewpoint, Bernard Pech asked whether it is now time to seriously consider climate engineering as a way to give more time for transitioning to clean energy. Packed into that sentence, and into Pech’s whole article, are a number of assumptions and principles that are not generally understood.

Most importantly, even if we are able to zero out greenhouse gas emissions by, say, 2050, the earth’s average global temperatures would not, at that point, revert back to those at some earlier date. As David Keith, professor of applied physics and public policy at Harvard and one of the leading experts on climate engineering, has pointed out in a NY Times guest essay (“What’s the Least Bad Way to Cool the Planet?” October 1, 2021), “Average temperatures will stop increasing when emissions stop, but cooling will take thousands of years as greenhouse gases slowly dissipate from the atmosphere.”

Consequently, average global temperatures will be much higher by the time emissions reach zero, and this past summer, the summer of 2022, may be the coolest for many years to come. Thus, the idea of climate engineering (which also goes by the names of “geoengineering” and “solar radiation management”) is to provide us with a mechanism for actually cooling the planet and so reducing the inevitable temperature increases, buying us time to get our carbon house in order.

In other words, it is a transitional technology, injecting a sulfur compound or engineered particles into the stratosphere to prevent a certain amount of solar radiation from reaching the earth. Climate engineering is not without its potential risks, and Pech alludes to a rogue nation deciding on its own to engineer the climate.

Last year, I chaired a program on solar radiation management, and David Keith was one of the speakers. What Keith and others working on this technology advocate is support for international research to determine whether solar radiation management can be effective, what its potential risks might be, and how, if it proved both effective and with benefits that far outweighed its risks, its utilization could be governed in a way that allowed all nations of the world to have some say in its deployment.

This technology is opposed by some environmentalists who fear that it will lessen our resolve to reduce emissions to zero, thereby extending our reliance on fossil fuels, and that its risks are not well known. I understand such opposition but do not think that it should impede research efforts to fully understand solar radiation management and to determine whether it might be a useful tool in our efforts to control climate.

It may well prove to be an important tool in managing the transition to zero greenhouse gases and in avoiding the inevitable damage caused by unchecked increases in global temperatures.

PRFO fundraising going strong

Support received from Beautification Foundation, Education Foundation

The Piedmont Recreational Facilities Organization (PRFO) has announced that fundraising is successfully continuing for the Piedmont Community Pool Project. To date, over \$500,000 has been raised towards PRFO’s goal of \$2,000,000 in their pledge to assist the City of Piedmont.

“We truly appreciate everyone who has donated to the Piedmont Community Pool Project to date,” said Steve Collins, PRFO President. “We are fortunate to live in a generous community that believes in supporting City projects. But we still have a long way to go. We hope the greater com-

munity will help ensure Piedmont has the funding needed to create a state-of-the-art facility for our athletes, our aquatic enthusiasts, and our families.”

In addition to individual community members, the project has received significant support from groups such as the Piedmont Beautification Foundation (PBF) and the Piedmont Education Foundation (PEF).

“PEF voted unanimously to support this project from our reserve funds. This is a very leveraged contribution that will support athletics and recreation for Piedmont students for years

to come,” said Rick Smith, Treasurer of the Piedmont Education Foundation.

In November 2020, with support of more than two-thirds of the vote, Piedmonters approved Measure UU, a \$19.5 million bond measure to pay for the replacement of the Piedmont Community Pool. Since Measure UU passed, however, extreme inflationary pressures have driven up costs. Earlier this year, the pool building design was substantially revised to reduce the overall costs by \$4 million. But construction costs continue to be high, and a \$2 million shortfall is anticipated. Without raising additional private funds, key elements of the project design will be lost.

The City of Piedmont rejected the first two bids received for construction of the pool and put the job out to bid again this month with hopes for better pricing.

The council hopes to award a contract by year-end, and break ground in 2023.

The community is invited to learn more about the Piedmont Community Pool Project and donate at [PRFO.org](https://www.prfo.org).

Piedmont Recreational Facilities Organization (PRFO), a non-profit, actively supports the development of public recreational facilities that serve residents of Piedmont. PRFO strives to work collaboratively with the City of Piedmont to bring private financial support to assist in the funding of projects that invest in healthy spaces within the city.

Chabot Space & Science Center annual gala raises \$325,000

On October 22, Chabot Space & Science Center’s annual Starlight Gala raised \$325,000 for STEM education. The event featured live music, one-of-kind art and the premiere of Chabot’s new exhibition, Astrolight. The star-studded event was attended by many local political leaders, including Oakland Mayor Libby Schaaf. Chabot recog-

nized 2022 Champion of Science Awardees, including CFO and longtime volunteer Fred Patton, and Retired Deputy Director of NASA’s Ames Research Center Lewis Braxton III. Additionally, Fremont High School teacher Rowan Driscoll was named recipient of the Carole C. Quan Excellence in Science Education Award.



Guests at Chabot Space & Science Center’s annual Gala in front of the Space Mirror, an art piece created by local artist Colin Bowring.

