

Journal of the Association for Climate Health

Summer 2020

Letter from the Managing Director

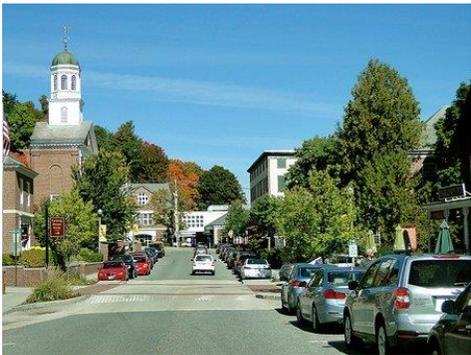
Welcome to our quarterly update – it is a pleasure to share our work with you! We invite your feedback as well as any climate-related stories you may have come across.

Outside, states and countries continue to have soaring COVID-19 infections and the economy is partly on hold. Which means a small reduction of pollution and greenhouse gases; yet this silver lining is small and most likely temporary. Complacency is tempting, but a luxury we still cannot afford.

So we continue to search for strategies to reduce climate impact at home, at work and in our communities. There are many such possibilities and we invite you to pick among them joyously. We have been active ourselves. So have some members of Congress, entrepreneurs and businesspeople, regulators and community leaders and many private citizens. This is encouraging indeed.

We wish you a safe life over the next several months, along with wise choices and good cheer! Enjoy the rest of this, our second issue of the *Journal of the Association for Climate Health*.

Best regards,
Nancy Boxer
Managing Director, Association for Climate Health



Our work over the past few months

Based on our survey on climate work in cities and towns, several contacted us to help them switch to solar power. They are finding that setting climate goals is not enough – 100% renewable by 2050 is a common one – because there are significant impediments and unknowns to putting their goals into practice. To help bridge this gap, we began several efforts:

- At the request of Sierra Club, we provided input for their Energy Transition Plan, now being adopted by municipalities moving towards 100% renewable energy for their facilities: police and fire stations, buildings, vehicles, street lights, schools, water treatment plants and so on.

- We formed the Municipal Solar Brain Trust, a working group of professionals helping cities and counties adopt renewables. As part of this group, we are helping switch hundreds of megawatts of electric demand to new solar capacity, replacing a mix of nuclear, oil, gas and coal.
- We created our *White Paper on Power Purchasing Agreements: A Route Forward for Municipalities and Institutions to Encourage Solar Power* which you can download from <https://www.a4ch.org/publications>.

We testified in front of two state government agencies on climate issues:

- In front of the PA Public Utility Commission, pressing one major utility to increase generation by solar and wind from 0.5%, completely out of step with statewide goals for renewable energy. This testimony is available on our Publications page.
- As a major state for fracking, Pennsylvania is the 4th largest source of greenhouse gas in the nation. Methane is 80 times more harmful than carbon dioxide, so needs to be regulated. We testified in front of the PA Department of Environmental Protection, advocating for strong regulation of fracking wells and pipelines. This testimony too is available on our Publications page.

Zoom meetings make it easier to testify in government hearings. If you have a climate effort anywhere in the country which needs additional support, contact us with details.

In the ongoing work to find and share climate solutions, we discovered an unexpected and completely unregulated source of climate harm – **surgeries**. Anesthesia gas is given to surgical patients and is exhaled later, mostly unchanged. Vented to the atmosphere, these gas molecules can trap as much as 2500 times more heat than carbon dioxide. Medical waste gases have long been given a free pass. Yet there are easy alternatives, and with 50 million operations a year in the US alone, these gases make a substantial and unnecessary impact. A4CH is beginning to publicize and educate hospitals and anesthesiologists, along with allies at Yale Medical School, Health Care Without Harm and the Medical Society Consortium on Climate and Health. You can read our *White Paper on Anesthesia as a Greenhouse Gas* at <https://www.a4ch.org/publications>. If you know any anesthesiologists or hospital administrators, please put us in contact so we can share what we know and ask for their help.



We continue reaching out to concerned scientists, academics, legislators and private citizens, an effort which has been considerably aided by our newest volunteer, Lovey B. Thank you very much, Lovey! For the rest of you reading this, please invite your climate-concerned friends, family or colleagues to visit our website and join. We love sharing the resources we discover!

Enjoy some of our top Idea Forum posts:

Agriculture:

World’s largest urban farm is up and running on a rooftop in Paris, France

Soil-free, insect-free, organic farming is happening on top of an exhibition hall covering 3.5 acres in Paris, France. Started by Nature Urbaine, the venture supplies hotels, restaurants and residents with local and sustainable fruits and vegetables, reducing food waste, energy costs and time to market. The method is not available for foods requiring deep roots – carrots, potatoes, fruit trees. The use of artificial intelligence and drones in agriculture is also briefly discussed – check out *The Guardian’s* Jon Henley https://www.theguardian.com/cities/2020/jul/08/the-future-of-food-inside-the-worlds-largest-urban-farm-built-on-a-rooftop?CMP=oth_b-aplnews_d-1



Climate Justice:



How one city slowly built diverse coalitions and stopped international coal shipments in their tracks *Sierra Magazine’s*

Heather Smith describes how ten years of work of developing a unity of interests among people of various race, class and political lines paid off with a win for the climate. Addressing, instead of ignoring, differences was a factor. Read at

https://www.sierraclub.org/sierra/how-build-diverse-coalitions?suppress=true&utm_source=greenlife&utm_medium=email&utm_campaign=newsletter

Climate Research:

Harnessing tide power The Department of Energy estimates that tidal energy could theoretically power over one million US households, and millions more around the world. This would vastly reduce the carbon footprint for producing power and also eliminate environmental damage from mining the coal, oil or gas which would otherwise be used. More power can be generated in smaller spaces than with solar, and studies suggest the new designs avoid harming marine life. Yet this technology has seen little development until recently. Now Scotland-based Sustainable Marine Energy is about to unfurl North America’s first floating



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tide energy plant in Nova Scotia's Bay of Fundy, long the Mt Everest of tidal locations. If it can work there, SME will be able to install sustainable energy trimaran boats built with tide-run generators near islands and coastal sites around the world. Elizabeth Royte reports in *Smithsonian* <https://www.smithsonianmag.com/innovation/push-tidal-power-face-biggest-challenge-180974369/>

Climate Strategy:



Government-sponsored sustainability programs from France include labelling all products with a carbon score, backing a carbon tax and criminalizing “ecocide” French President Emmanuel Macron pledged 15 billion euros over two years to fight climate change in France, and has accepted most of the proposals of the French Citizens’ Commission for the Climate. *The Independent’s* Esmé O’Keeffe contrasts this with British Prime Minister Boris Johnson’s climate plan which includes planting trees, but little else of substance. <https://www.independent.co.uk/voices/uk-france-boris-johnson-emmanuel-macron-green-revolution-climate-crisis-a9602161.html>

Creating Behavior Change:

How to think and talk about Climate Change Check out the amusing and informative Adam Levy’s YouTube channel ClimateAdam at <https://www.youtube.com/climateadam>. Adam, a British climate scientist, makes it fun and gives lots of great examples. Some faves:

- Why the climate crisis is less like a bomb about to go off, and more like a person who keeps getting punched in the face - <https://www.youtube.com/watch?v=RoQRkmRjz38&t=262s> .
- How to speak to friends and family about climate change so they will actually listen <https://www.youtube.com/watch?v=aCZcphy4EkU&t=298s> .
- Sea Levels and Gin & Tonics - <https://www.youtube.com/watch?v=8zx8MOvFLxM> .
- Why the Greenhouse Effect is like a hot sweater, which illustrates in a delightfully silly way the foolish thinking behind climate denial <https://www.youtube.com/watch?v=23t5i2Mij6M>



Individuals:



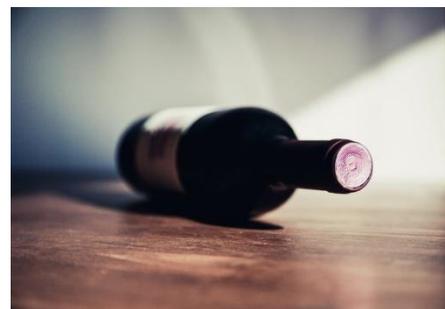
You (yes, you!) can directly challenge local pollution Heather Smith of the Sierra Club interviews former Texas Assistant DA on how ordinary people are stopping polluters in their tracks. Gas pipeline leaks are often reported by people calling to complain about smelly air; grassroots complaints brought the Flint, Michigan lead-contaminated water supply to a head; similarly for unsafe indoor air pollution in the FEMA-provided trailers after Hurricane Katrina. It starts with individuals, but it helps to have a sympathetic DA and a judge willing to try a case. For more details see

<http://click.emails.sierraclub.org/?qs=ac0af9ec7695ec9f5d4f677e7f337e997f880c140e39a47ddf3c6d73c2bfab757f9fd2518d5c6420ed31ac014ea0e93ad9bd1b5c90019849>

Industry:

Winery reduces carbon footprint by using thinner glass bottles

Yale Climate Connections' Ariel Hansen reports that Jackson Family Wines has been cutting back on their greenhouse gases since 2008. Their recent reduction comes from realizing they did not need such thick glass bottles, so this would be an easy gain. Consumers do not seem to notice the difference; it uses less fuel to make and to ship the lighter bottles, and the company can cut its costs all at the same time – talk about a win for



everybody! https://www.yaleclimateconnections.org/2020/05/california-winery-finds-a-clever-way-to-cut-carbon-pollution/?fbclid=IwAR293E5OviG8lXXrmoh8sAPHN2qS_RsMQZ4sdxiO2qmiXa2oFA9zzsA-cg

Investors:



Shareholder resolutions are pushing fossil fuels companies worldwide towards greater sustainability International companies such as BP, Shell and Total have recently moved towards strong climate-friendly pledges, partly due to shareholder pressure, reports Emily Pontecorvo in *Grist*. US companies have been more protected by the Securities and Exchange Commission which allowed Exxon to block six climate-related resolutions from shareholder voting. Chevron shareholders were not able to get a greenhouse gas proposal on the ballot, but won a different ballot vote requiring the company *Journal of the Association for Climate Health, Spring 2020*

to discuss how it's lobbying efforts align with Paris Agreements every year. 53% of shares voted in favor. So if you generally pass on voting your shares, assuming it will not make a difference, these successes demonstrate otherwise. <https://grist.org/climate/shareholders-to-big-oil-do-more-on-climate-change/>

Legal:

Tiny rural county sets legal precedent for stopping fracking

waste Grant Township PA, just half an hour south of Punxsutawney PA, made famous in the movie *Groundhog Day*, has been fighting for seven years to stop fracker Pennsylvania General Energy (PGE) from injecting toxic chemicals into the ground where it gets into local water supplies and rivers. Several years ago Grant's citizens adopted a town charter making injection wells illegal and giving nature – streams, species – legal rights. In 2017 the Pennsylvania Department of Environmental Protection sided with PGE by suing the town for interfering with their authority to administer state oil-and-gas policy. Last month they shifted position, citing the need to respect local laws, and revoked PGE's permit for the well. Litigation continues, but the issue of whether a town can enforce stronger environmental protections than state or federal laws, and whether non-humans can have rights in human courts, may increasingly be pressed in courts worldwide. *Rolling Stone's* Justin Nobel reports



https://www.rollingstone.com/politics/politics-news/rights-of-nature-beats-fracking-in-small-pennsylvania-town-976159/?fbclid=IwAR3D7A6BZBWycixZD0PgU_PhAv6f4H9PLbTow85OL0DVkCD1kK3z_2dPctE

Science and Technology:



Sugar made from air? It's now possible Start-up AirSugar uses microbes to capture carbon from the air. The result – a climate-positive product using a fraction of the land, water and fuel used to manufacture sugar by traditional methods. The startup company is currently looking for partners to scale up for production. <https://air-sugar.com/>

State and local:

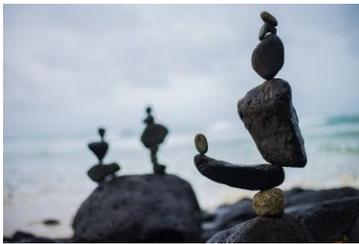
New Jersey adds climate change to its K-12 school curriculum

The first state to add climate to its standard education will bring greater awareness to the state's 1.4 million students, reports *CNN's* David Williams. New Jersey is reacting to the pinch of climate hazards it already faces – devastating hurricanes, beaches disappearing, algae blooms, unexpected heat. The Garden State aims to be part of the solution, with pertinent education and a goal of 100% clean energy by 2050, among other programs.

<https://www.cnn.com/2020/06/04/us/new-jersey-climate-schools-scen-trnd/index.html?fbclid=IwAR0SaH-ITVHh8gBLbvJtHRsLO-IHmGzYVa-j58kP8wDNuHfa7XQ5nj0ECJ8>



Utility Companies:



Wind and solar can actually help stabilize the electricity grid –

this in contrast to long-held assumptions that they destabilize the network of power lines connecting generators to users. *Forbes'* Jeff McMahon interviews National Renewable Energy Labs' analyst Paul Denholm on how wind power can quickly ramp up or down to match the constantly changing demands of the system which are harder for more conventional sources to do. To make best use of this, wind farms would need to be compensated for curtailed production as well as provided production. Battery storage is also needed to maximize use of renewables. <https://www.forbes.com/sites/jeffmcmahon/2020/06/08/renewables-can-solve-some-variability-problems-better-than-thermal-plants-can-nrel-analyst/#42bf6b6f4fdf>