

The plan to save the world

'Drawdown' lays out the top 80 climate-change solutions already underway

BY EMILY GREEN
STAFF WRITER

Around the globe, people are cultivating food, harnessing energy and building communities using methods that have the combined potential to reverse global warming.

Scaling up these methods would not only stop greenhouse gas accumulation in the atmosphere; it could actually draw more carbon dioxide back into the Earth's reserves than the sum of all emissions.

The result goes beyond climate stabilization and mitigation. This drawdown could reverse our planet's disastrous course toward climate catastrophe.

That's according to a coalition of nearly 200 researchers, scientists, economists, biologists, climatologists and other relevant experts behind the book "Drawdown: The Most Comprehensive Plan Ever Proposed to Reverse Global Warming."

At 240 pages, the plan to save the world might not seem as comprehensive as the book's title would suggest, however the research and calculations behind each solution are immense.

Released on April 18, it's also the first plan of its kind. Never before has anyone calculated the cumulative impact of implementing a broad range of solutions on

such a massive scale.

With colorful photographs and on-the-ground examples of where and how each method is already being utilized, the book

lays out the 80 most effective and economically viable solutions to climate change.

Each method is ranked according to how much CO2 equivalent greenhouse gases it has the potential to avoid or sequester by 2050.

The rollout of a comprehensive online database that will make additional data, tools and expanded models freely available to the global public has been delayed. In the meantime, each solution is summarized at drawdown.org, and interested parties can request data for each solution by filling out an online form available on the website.

The coalition behind "Drawdown" produced this plan with the hopes that individuals, communities and governments large and small would adopt the solutions contained within it.

Already, the Drawdown team has agreed to collaborate with the General Commonwealth of Nations to integrate solutions into the plans of its 52 member countries. Combined, these nations represent nearly one-third of Earth's population and include Canada, Australia, U.K. and India. The U.S. is not a member.

While many of the team's top methods, such as wind turbines and solar farms, are widely recognized as necessary steps in addressing climate change, others are less obvious.

For example, if business travelers attended meetings electronically rather than physically, it would save nearly 2 gigatons of carbon dioxide emissions and \$1.3 trillion in travel expenses over 30 years.

The book highlights a company with offices in Prague and Toronto that uses a two-wheeled scooter with an attached tablet to send its employees between offices. The screen on the tablet displays the face of a visiting virtual guest who can remotely control the scooter to tour the facility and meet face-to-face with other staff.

Another solution is bioplastic. According to "Drawdown," plastic production is expected to triple by 2050, and today almost all of it is petro-plastic, made from fossil fuels. But experts estimate 90 percent of plastics could be made from other sources, such as plant derivatives, instead. If bioplastic production was scaled to account for 49 percent of the market by 2050, it would avoid 4.3 gigatons of emissions.

The book's editor and initiator, prominent environmentalist Paul Hawken, admits that while these are the most plausible methods for achieving drawdown, not all of them are ideal.

That's because in maintaining objectivity, the coalition included the practices that have the most greenhouse-gas-reducing ability, whether they liked them or not.

Instead, they evaluated each potential solution by asking whether it was currently available and scaling, if it was economically viable, if it had the ability to significantly reduce greenhouse gases in the atmosphere, if there were data available to model it to a global scale, and if the positive benefits outweighed any negative results.

That's how nuclear energy came in at No. 20. If it remains on its current growth path, the Drawdown team estimates, nuclear power plants will avoid about 19 gigatons of CO2 emissions by 2050. Reliance on the hazardous energy source is also projected to peak and then decline within that timeframe.

See DRAWDOWN, page 5

Top 10 solutions

According to the Drawdown team's Plausible Scenario:

1. Refrigerant management
2. Onshore wind turbines
3. Reduced food waste
4. Plant-rich diet
5. Tropical forests
6. Educating girls
7. Family planning
8. Solar farms
9. Silvopasture
10. Rooftop solar

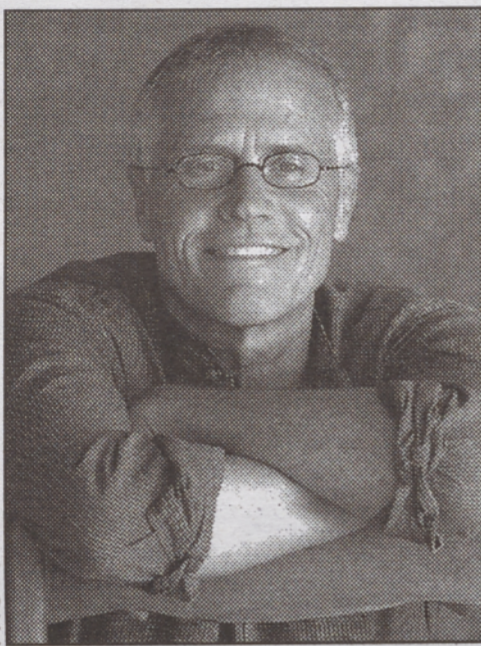


PHOTO BY RAMOND BALTAR

Paul Hawken

DRAWDOWN
THE MOST COMPREHENSIVE
PLAN EVER PROPOSED TO
REVERSE GLOBAL WARMING
EDITED BY PAUL HAWKEN

