

# MIT ALUMNI FOR CLIMATE ACTION

## Actionable Climate Technologies: Innovation, Policy, and Engagement

On this **Earth Day**, we reflect on the urgency of climate action and the progress made so far. MACA is pleased to announce an upcoming virtual session focused on accelerating real-world impact.

Join us on **Thursday, June 4 at 7:00 PM EDT (virtual)** for **“Actionable Climate Technologies: Innovation, Policy, and Engagement.”** [REGISTER HERE](#)

Innovation in climate technology continues to advance, but innovation is not enough. We need to move technologies from maturity to widespread adoption, scaling them for impact.

After an Introduction by **Shiladitya DasSarma, Ph.D.**, University of Maryland School of Medicine, MACA President, a virtual panel and a lively discussion session will follow on these important topics in climate action. We will focus on what is deployable now, and explore the real-world challenges between promising solutions and actual real-world adoption and scale.

### Panelists:

- **Bethany Patten**, Executive Director, Climate Policy Director, MIT Sloan School
- **Joylette Portlock, Ph.D.**, Sustainability Senior Advisor
- **Harini Sundaram**, Strategy and Growth Advisor, Energy Transition

The discussion will cover two key themes:

First, how technologies move from technical readiness to commercial deployment. What helps solutions move beyond pilots? What role do business model innovations, such as Energy-as-a-Service, play?

Second, what drives scale once technologies are viable? Scaling requires more than technology. It depends on financing models, policy and regulatory frameworks, market demand, and ecosystem partnerships.

The session will cover practical real world examples from distributed energy systems, policy frameworks, and institutional and behavioral factors that influence adoption. The discussion will also examine where breakdowns occur and where opportunities lie.

This event is designed for a diverse set of participants. Perspectives gathered will help shape future MACA initiatives within the Technology theme, including deep dives, working groups, and collaborations.

As we mark Earth Day, this invitation is an opportunity to move from awareness to action. The focus is not just on what is possible, but on what can be implemented and scaled today. The event itself is planned to coincide with **World Environment Day**, celebrated annually on June 5. This year’s theme is A Global Call for Climate Action.

**We hope you can join us June 4! [REGISTER HERE](#)**

**MITALUMNI**



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# Editorial: The Endangerment of American Democracy

**“The EPA’s repeal of the endangerment finding and safeguards to limit vehicle emissions marks a complete dereliction of the agency’s mission to protect people’s health and its legal obligation under the Clean Air Act.”  
Dr. Gretchen Goldman, president and CEO, Union of Concerned Scientists.**

On Feb. 12, 2026, the U.S. Environmental Protection Agency (EPA) finalized a rule overturning its earlier “Endangerment Finding” that greenhouse gas (GHG) pollution in the atmosphere endangers human health and requires regulation. The consequences of this decision are devastating. It prohibits the EPA from taking actions to limit and reduce the volume of greenhouse gases from fossil fuels that the US emits into the atmosphere, and it impedes the replacement of energy sources from fossil fuels with proven - and less expensive - renewable clean sources of electricity (notably solar and wind power). It destroys faith and trust in the US willingness as a nation to apply its scientific knowledge and resources for the benefit of humanity as well as itself. It leaves the field wide open to others, including its ideological and military competitors, to establish themselves as global innovation leaders in the next generation of key energy technologies.

Six GHGs were specifically covered, the most significant being carbon dioxide and methane. The EPA also repealed emissions standards for light-, medium- and heavy-duty vehicles. The decision does not entirely eliminate all regulation of air pollution. The EPA can still regulate pollutants that directly impact local air quality such as ground-level ozone, particulate matter, carbon monoxide, lead, and sulfur dioxide. But the rescission removes the legal basis for regulating greenhouse gases generated from extracting and burning fossil fuels.

The legal argument used to justify repeal of the Endangerment Finding is that the 1970 Clean Air Act applies only to direct, localized pollution, whereas GHGs spread far and wide and therefore are not subject to regulation. The banning of Chlorofluorocarbons was recognized worldwide as necessary, precisely because the compounds, while posing little or no local hazard, spread throughout the globe to reach remote parts, such as the polar ice caps, where they could ultimately destroy the ozone layer, which protects life on earth from excessive UV radiation from the sun. Past national and international law recognized the need to have local regulation of substances that

can spread far and wide.

The legal “argument” from the misguided EPA leadership flies in the face of commonsense and betrays an abject disrespect for the opinions, health, and wellbeing of other humans with whom we share this planet and the atmosphere. It shows to the rest of the world that the US is no longer a champion of democracy and a remarkable and inspiring center of knowledge and innovation. It is not prepared to act as a leader - let alone an exceptional one - in addressing a threat to all humanity for which it bears significant responsibility. The US is the largest historic emitter of greenhouse gases, responsible for over 20% of cumulative global emissions from 1850 to 2025. Currently, it is the world's second-largest annual emitter, accounting for roughly 11% to 15% of global GHG emissions.

The nullification of the EPA's Endangerment Finding is another step in the ongoing alarming Endangerment of American Democracy, intensifying concerns expressed in the editorial "Dark Clouds Over American Democracy" published in [issue 3](#) of the 2025 MACA newsletter. Threats to American Democracy are evident in ongoing parallel federal assaults on science, the rule of law, and the rights, health, well-being and safety of US residents, citizens and non-citizens. They are based on or justified by denials of verifiable and verified evidence in every relevant area of knowledge and pertinent event.

It is highly unlikely that current federal policies regarding climate action – or any other domain – can be changed by appealing to evidence whose validity has already been rejected on multiple occasions. The path forward must lie through replacement of elected officials and others at key levers of federal power with people whose values, goals, priorities and characters are very different from current incumbents. The first opportunity for progress in this direction will arise in the midterm elections of November 2026. Through the election of a more responsible Congress – attentive to its responsibilities for the sake of science, climate action, public health and other important domains – we can work to preserve American Democracy. Support for these critical things must be expressed loudly and convincingly.



Recent [video message](#) given by António Guterres, Secretary-General of the United Nations, supporting a just transition.

## Hopeful Global Climate Action Following COP30

By **Shiladitya DasSarma**

At the UN COP30 in Belém, Brazil last November, the US government was absent and little progress was made to move forward global policy on limiting fossil fuels (see article in MACA's [Newsletter Issue 4](#), p. 3). In fact, the words “fossil fuels” were not mentioned in the final agreement. However, a group of countries decided to follow-up on COP30 with a conference to develop a Roadmap toward the goal of starting the transition away from climate change-causing fossil fuels. Now, Colombia and the Netherlands are co-sponsors for the [First International Conference on the Just Transition Away from Fossil Fuels](#) in Santa Marta, on the Caribbean Sea coast of Columbia to collectively address this critical goal.

The conference represents a huge opportunity to jump start the transition from fossil fuels to renewables with the participation of potentially 85 nations whose economies represent a large fraction of the global GDP. As summarized in a recent [article in the Guardian](#), such a show of force could help to tilt the forces away from development of fossil fuels and toward renewable energy technologies like wind and solar which are cleaner, greener, and generally more economically viable in the long term. Moreover, support for such a just transition is strongly supported by [people all over the world](#) as well as António Guterres, the UN secretary general. Among the most important challenges facing the Just Transition conference is how to stop the current [government subsidies](#) for fossil fuels estimated to be over \$ 7 trillion.

## Nature Report Scientists Persevere

By **Amelia Macapia**

Just weeks before a scientific report on the state of nature in America was to go into federal review, the Trump administration terminated it. Nevertheless, more than 150 researchers have persisted in publishing the document.

The 868 page report provides an inventory of the condition of nature from marine ecosystems to deserts and tundras. It also encompasses human relationships to nature and nature's benefits for communities across public health, economy, and national security, emphasizing that policies that protect nature also benefit human health. While the report extensively documents trends undercutting nature's benefits, from pollution to biodiversity loss, it also offers solutions. The chapter, “Bright spots” highlights how positive human action has benefited restoration and conservation, highlighting natural resource management opportunities.

The “National Nature Assessment”, a government project under the Global Change Research Act, was first authorized as an Executive Order from President Joe Biden, signed on Earth Day in 2022. Now renamed “The Nature Record” after President Donald Trump cancelled the project, scientists have independently submitted their work for review by the National Academies of Sciences, Engineering, Medicine. It has also been released for public comment. You can leave your comment on [The Nature Record](#) before May 30th.

## Promotional Material

### Museum of Science Event



MIT Alumni for Climate Action is a Sparks After Dark Igniter with the Boston Museum of Science

Join us on Friday, May 1 for a high-energy after-hours celebration featuring cocktails, desserts, immersive experience, and late-night access to the Museum!

Preferred pricing: \$100/ticket (normally \$125)

**Access code: SPARKS26MITCLIMATEALUM**

Tickets available now: [mos.org/sparksafterdark](https://mos.org/sparksafterdark)  
This event is expected to sell fast — we hope to see you there!

### Inviting Contributions

Looking for volunteers: MACA needs your help!

Is your passion advocacy, policy, justice, entrepreneurship, technology, education, or campus-related? Contact us at [info@maca.earth](mailto:info@maca.earth) to contribute your ideas.

Updates, announcements, editorials and short articles can be featured in our next quarterly newsletter through this [submission form](#).

To share upcoming meetings and events, Victoria Owens has set up an [event submission form](#) and [MACA's new calendar](#). You can organize MACA events with local MIT Clubs and request a MACA panel for events [here](#).

Help our community grow - it takes a member to bring in a member - invite other alumni and affiliates to join MACA. MIT Alumni can join by [filling out this form](#). Affiliates can be sponsored and join members by [filling out this form](#). Remember to also check out [MACA.Earth](#) webpages for more news and information.

### Blue Dot Motorworks

Contributed by Tom Gurski

*Startup company Blue Dot Motorworks was founded by MACA board member Tom Gurski, has launched an equity-based crowd funding campaign via [Wefunder](#).*

Blue Dot Motorworks is addressing the elephant in the room when it comes to decarbonizing road transportation, the largest end-use source of greenhouse gas: no matter how fast we transition production to EVs, the global fleet will not turn over fast enough to hit our climate targets. We have developed the first universal technology for electrifying existing vehicles.

Our vehicle-agnostic plug-in hybrid conversion systems can be mass-produced at the lowest possible price. They can be installed by any mechanic, anywhere, in about a day, enabling global reach and scale. The systems reduce typical fuel consumption by 70%, paying for themselves in as little as two years and saving tens-of-thousands of dollars over their lifetimes. They can be charged from a standard wall outlet, or up to six on the same circuit as one EV. They eliminate the embodied carbon of new vehicle production, require only 20% of the battery of a full EV, reduce the need for public charging infrastructure, and eliminate the need to prematurely scrap perfectly good vehicles.

Blue Dot provides a critical missing tool in our fight against climate change.