



Each year, the American Energy Society surveys the energy landscape and spotlights the people, media, technologies, and artists that made extraordinary contributions to the sector. The following are the 2021 winners.

### PEOPLE AWARDS

In case you missed it ...

#### Energy Writer of the Year 2021

*The premier literary award for energy*

[Katharine Hayhoe](#)



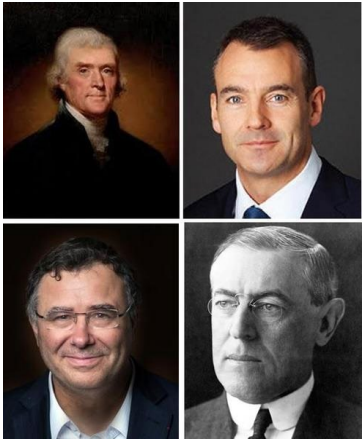
#### Energy Persons of the Year — Global

##### Bernard Looney and Patrick Pouyanné

To be sure, Thomas Jefferson didn't mean it literally when he wrote "All men are created equal," and Woodrow Wilson probably didn't think "self-determination" applied to all nations. Yet, their words helped ignite political movements that made the world better.

For a similar reason, the American Energy Society names CEOs Bernard Looney of BP and Patrick Pouyanné of TotalÉnergies (formerly Total), as Energy Persons of the Year.

Their leadership of these massive companies alone would qualify them for consideration—petroleum still fuels 95% of the machines used to move all people and all goods for all purposes. However, it is their public declarations that fossil fuel companies must do things differently that earned them the award. For instance ...



"[We are] aiming to reduce and neutralize the carbon in the oil and gas that we dig out of the ground." — Bernard Looney

"[Oil] is at the heart of the challenges we face to keep the global average temperature rise below 2°C." — Patrick Pouyanné

It's appropriate to wonder about the sincerity of these statements. It is quite possible — even likely — that their public remarks are intentional greenwashing efforts. After all, both companies still have aggressive oil and gas E&P strategies, both companies contribute mightily to overall global emissions, and both CEOs are clear about the primacy of fossil fuels.



A recent [skit on SNL](#) conveys popular concern (BP won the satirical *You are using what to sell what?* award at 1:57 in the YouTube video.).

Yet it is also true that BP and TotalÉnergies are charting new paths, perhaps more so than all other major fossil fuel companies. They have updated their respective marketing strategies (Total changed its name to TotalÉnergie, and a while back BP began operating under the brand "beyond petroleum" rather than British Petroleum). Both companies are aggressively investing in renewable energy technologies, and have pledged significant near-term cuts in oil production. And both did the unthinkable: BP publicly questioned the ethics of the powerful API lobbying group, while Total pulled out completely.

Could Messrs. Looney and Pouyanné do more? Probably yes. But they have publicly acknowledged that the oil and gas industry has contributed to and has a role to play in this generation's greatest challenge — climate change. They can't walk back their words. The world watching.

## Energy Person of the Year, United States

### Joe Manchin



The AES Energy Person of the Year award profiles a person or group that, *for better or for worse*, has done the most to influence the sector and the world in that year.

Based on that criteria, Joe Manchin, US Senator from West Virginia, is our pick for Energy Person of the Year, US.

The energy transition is at a critical inflection point. Senator Manchin evokes hysteria from his opponents and hyperbole from his supporters. For the former, he is the sole obstruction to saving the planet, and for the latter he is the lone savior of forgotten West Virginia. (e.g. *USA Today* [headline](#): "Planet Earth or 14,000 coal jobs. Guess which Sen. Joe Manchin picked?") But, it is his tagline, "too much, too soon," that defines the tone, tenor, and pace of the energy transition, both in the US and throughout the world ... *for better or worse*.

## Youth Activist of the Year — nominees

- [Arshak Makichyan](#) (Moscow, Russia)
- [Nicole Becker](#) (Buenos Aires, Argentina)
- [Xiye Bastida](#) (New York, NY)
- [Abby Bonita](#) (Manila, Philippines)
- [Pratik Gauri](#) (Delhi, India)
- [Dejea Lyons](#) (Cayman Islands)
- [Rosette Muhoza](#) (Kigali, Rwanda)
- [India Logan Riley](#) (Auckland, NZ)
- [Leah "Green Girl" Thomas](#) (Orange, CA)

## Winner — Youth Activist of the Year



### Leah "Green Girl" Thomas

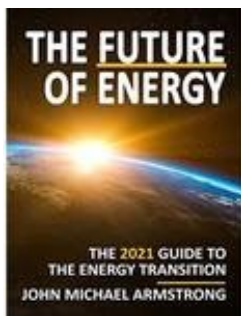
Leah has written her first book, *The Intersectional Environmentalist: How to Dismantle Systems of Oppression to Protect People + Planet* ([preorder](#)).



## MEDIA AWARDS

(Excluding [Saving Us](#), by Katharine Hayhoe)

## Best Energy Book (non-fiction) — nominees



[First Fuel: India's Energy Efficiency Journey and a Radical Vision for Sustainability](#), by Padu Padmanabhan

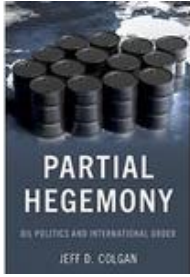
[Renewable Energy Crash Course: A Concise Introduction](#), by Slobodan Petrovic

[The Future of Energy: The 2021 Guide to the Energy Transition](#), by John Armstrong

### Winner — Best Energy Book

[The Future of Energy](#), by John Armstrong

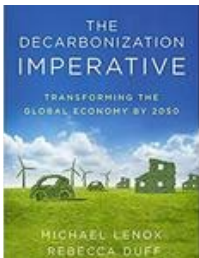
## Best Energy-Policy Book (non-fiction) — winner



[\*Partial Hegemony: Oil Politics and International Order\*](#), by Jeff D. Colgan

When and why does international order change? The largest peaceful transfer of wealth across borders in all of human history began with the oil crisis of 1973.

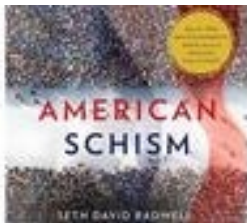
## Best Energy Political-Economy Book (non-fiction) — winner



[\*The Decarbonization Imperative: Transforming the Global Economy by 2050\*](#), by Mike Lenox and Rebecca Duff

If we are going to avoid the worst effects of climate change, we are going to need to effectively "decarbonize" the global economy by 2050.

## Best Energy Intellectual Studies (Non-fiction Book) — winner



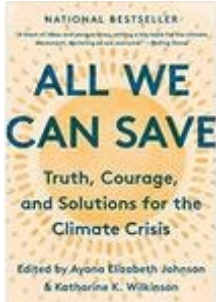
[\*American Schism: How the Two Enlightenments Hold the Secret to Healing our Nation\*](#), by Seth Radwell

America doesn't need to stop disagreeing; instead, it needs to accentuate the right disagreements.

## Best Energy & Environment Book (Non-fiction) — nominees

- [\*Speed & Scale: An Action Plan for Solving Our Climate Crisis Now\*](#), by John Doerr
- [\*How to Avoid a Climate Disaster: The Solutions We Have and the Breakthroughs We Need\*](#), by Bill Gates
- [\*Electrify: An Optimist's Playbook for Our Clean Energy Future\*](#), by Saul Griffith
- [\*Regeneration: Ending the Climate Crisis in One Generation\*](#), by Paul Hawken
- [\*How to Talk About Climate Change\*](#), by Rebecca Huntley
- [\*All We Can Save: Truth, Courage, and Solutions for the Climate Crisis\*](#), by Ayana Elizabeth Johnson and Katharine Wilkinson (editors)
- [\*Hacking Planet Earth: Technologies That Can Counteract Climate Change and Create a Better Future\*](#), by Thomas Kostigen
- [\*Unsettled: What Climate Science Tells Us, What It Doesn't, and Why It Matters\*](#), by Steven Koonin
- [\*Climate Change: Reasons to Worry Less\*](#), by Steve McGee
- [\*The New Climate War: The Fight to Take Back Our Planet\*](#), by Michael Mann

## Winner: Best Book Energy & Environment



### [All We Can Save](#)

by Ayana Elizabeth Johnson and Katharine Wilkinson (*editors*)

A collection of essays and poetry that highlights a wide range of women's voices in the environmental movement. See also the *All We Can Save* [project](#).

## Best Peer-Reviewed Article About Energy

(For a general audience)

**Winner:** [Renewable energy and geopolitics](#), by Vakulchuka, Overland, and Scholte

Summary: Will the new energy transition stabilize global geopolitics? Too early to tell: there are new interdependencies between new state relationships as a result of new dependencies on rare earth materials.

## Best Indie Energy Blog

**Winner:** [Yale e360](#). The e-magazine, published at the Yale University School of the Environment, covers a wide range of topics, from energy-tech to policy, to agriculture and oceans, and from cities to solutions.

## Best Article About US National Laboratory Research

**Winner:** Berkeley National Lab for "[Halfway to Zero](#)." The US power sector's significant reduction of greenhouse gas emissions from electricity generation over the past 15 years is an indication of what bold efforts can achieve.

## Best Trade Magazine (single issue) About Energy



**Winner:** *The Economist*, [Energy Shock](#) (October 16 - 22, 2021). The first big energy shock of the green era; there are grave problems with the transition to clean energy power.

## Best Work of Journalism — nominees



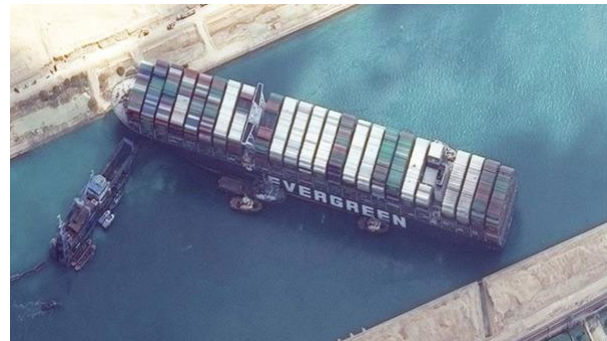
- [Paradise Lost](#): Hawaii's Disappearing Beaches, by the *Honolulu Star* (reporting)
- [The Historic Texas Freeze](#), by KUT 90.5 (breaking news)
- [The \\$5 Forest](#) and the Plunder of West Papua, by Al Jazeera (interactive)

Winner: [The \\$5 Forest](#)

## Best Energy/Sustainability Photos in 2021



The Texas Winter freeze of 2021



The Ever Given blocks the Suez Canal



Potpecko Lake in Serbia drowning in garbage.



Masks that capture cow burps.



ComEd weed-eating goats gets river boat cruise.



Mountain of garbage in Delhi, India (120 ft elev.)

## Podcast of the Year — nominees

- [How to Save a Planet](#), by Alex Blumberg and crew
- [Laundry Done Right](#), by Malcolm Gladwell
- [Let's Talk About It](#), by Sabrina Halper
- [Catalyst](#), with Shayle Kann
- [Industrial Talk](#), by Scott Mackenzie
- [A Matter of Degrees](#), by Drs. Katharine Wilkinson and Leah Stokes
- [The Carbon Copy](#), by Canary Media

## Winner: [Laundry Done Right](#), by Malcolm Gladwell



Is there a right way to do your laundry? Of course there is. Malcolm Gladwell offers a closer look at the delicate science of cleaning your clothes.

## Next-gen Energy/Sustainability Journalist to Watch



### Alexandria Villaseñor

Insightful coverage and critique of COP26 got our attention; her brilliant use of [Twitter](#) caught the attention of a global audience.

## Best of the American Energy Society, 2021



Best Issue of *Energy Today*

[Top-3 energy-related Supreme Court cases in US legal history](#)

Best Original Report (*tie*)

- [Empowering Impact](#): A Report On All US Incubators and Accelerators of Energy-Tech
- [500 Global Sustainability Thought Leaders](#)

Best Energy Ecosystem Map: [Denmark](#)

## Best *Energy Matters* Story

(Based on reader interest)

A comparison of three conceptual designs for a national grid, March 22, 2021.

You must be a [Member](#) to have access to the complete AES archive, including but not limited to past publications of *Energy Matters*.

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## TECH & MARKET AWARDS

### Most Interesting Energy Company

- [Redwood Materials](#) (battery recycling ... finally!)
- [Climeworks](#) (turned on "Orca")
- [SoCalGas](#) (blended hydrogen into fuel supply)
- [Tesla](#) (huge deal with Hertz)
- [NanoGraf](#) (a fast-growing Li-battery development company)

**Winner: SoCalGas.** The nation's largest natural gas distribution utility tested the effects of a [hydrogen blend](#) on natural gas infrastructure and equipment. (*Did we just witness a moonshot?*)

### Most Notable Energy-Tech Research Where Everyone Wins

(Includes exceptional individual contributions)

- Chemistry of carbon materials, heterogeneous catalysis, and climate action ([Zinfer Ismagilov](#), Siberian Branch of the Russian Academy of Sciences).
- Artificial photosynthesis ([Suleyman Allakhverdiev](#), K.A. Timiryazev Institute of Plant Physiology of the Russian Academy of Sciences).
- Battery nanomaterial design ([Yi Cui](#), Director of the Precourt Institute for Energy, co-director of the StorageX initiative project, Stanford University).
- Nuclear waste and natural gas pyrolysis ([Carlo Rubbia](#), Italian particle physicist, winner of the Nobel Prize, researcher at CERN).
- AI guided smart- and micro-grid system, ([Nikolaos Hatzigiorgiou](#), Director, Full Professor, National Technical University of Athens).
- Liquid sunlight, by [Harry Atwater](#) (Director of JCAP, Professor of Applied Physics and Materials Science at Caltech).



## Indie-Innovator of the Year — nominees

(Criteria: the simplest innovation with the greatest impact.)

- David Amster-Olszewski was told by his mother to help people install solar panels, which turned into the "community solar" start-up [SunShare](#).
- Inna Braverman is the founder of [Eco Wave Power](#), an Israeli company that harvests the power of the sea.
- Bizimungu Claver, from Muhanga, Rwanda, invented a [hydropower plant](#) with the capacity to generate 15 kilowatts.
- Stanford scientist [John Dabiri](#) adapted the way fish move to a new type of turbine that spins like a top on a much smaller vertical axis.
- Richard Hardiman sketched a design of [WasteShark](#), a plastic-grabbing aquadrone, while sipping coffee on a beach in a South African cafe.
- Three Chilean students, Camila Rupcich, Evelyn Aravena and Carolina Guerrero, invented a bio-circuit with an [E-Kaia](#) electrode that captures electrons in healthy soil.

## Indie-Innovator of the Year — winner

### Bizimungu Claver



Bizimungu Claver built a small hydroelectric power plant from scratch and houses it in a mud-brick shack. Now, more than 50 families in Muhanga Village have their first electricity ever, thanks to a man who has no formal education.



## Energy "Art & Entertainment" Awards

### Best Documentary About Energy and/or the Environment

[A Glitch in the Matrix](#) - if we are living in a simulation then we clearly need a lot more power.

[Climate Emergency: Feedback Loops](#) - the climate's known-unknown variable.

[Power of the Paddle](#) - rebuilding the Chesapeake ecosystem.

[Seaspiracy](#) - when sustainability is not-so-sustainable.

[Siona: Amazon's Defenders Under Threat](#) - living on the edge of a changing climate.



**Winner:** [Siona](#), by the Pulitzer Center and The New Yorker. Summary: Adiela's personal story is the core of the film as she tries to deactivate landmines in the Amazon basin, but there is a powerful subtheme about a young Indigenous leader living on the frontlines of climate change induced conflict.

## The best popular movie (sort of) about energy — nominees

- [Don't Look Up](#) (releases December 10, 2021): Two low-level astronomers try to warn mankind of an approaching comet.
- [Dune](#). Malevolent forces explode into conflict over the planet's exclusive supply of the "rare earth elements," and it's up to Paul Atreides to save the day.
- [Free Guy](#). A bank teller discovers that he lives in a world of limitless energy but he's determined to save the day his way before it's too late.
- [No Time To Die](#). A brilliant (energy) scientist is kidnapped. James Bond was enjoying a tranquil life in Jamaica ... until he has to save the day by rescuing the scientist.
- [Shang-Chi and the Legend of the Ten Rings](#). Shang-Chi has extraordinary power from martial arts, but he can't overcome the mysterious Ten Rings organization.
- [Tenet](#): A secret agent travels through time and bends the physical laws of nature in order to warn the world of potential war.



## Best movie — winner

### [Dune](#)

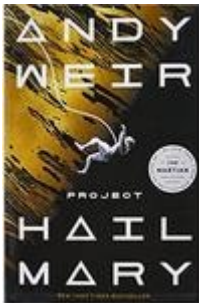
Nothing in energy is more important right now than rare earth elements.



## Best Book of Fiction (sort of) About Energy and/or the Environment — nominees

- [The Cheat Sheet: A Romantic Comedy](#), by Sarah Adams (Summary: How much energy does it take to leave the friend zone?)
- [The Spanish Love Deception](#), by Elena Armas. (Summary: Three days worrying about a wedding, a trip to Spain, and a most infuriating man. In other words, a story of wasted energy.)
- [The Last Thing He Told Me: A Novel](#), by Laura Dave (Summary: An "energetic" mystery about a woman who thinks she's found the love of her life — until he disappears.)
- [Klara and the Sun](#), by Kazuo Ishiguro (Summary: Although it takes place in a dystopian future, the robots aren't a force for evil. Will we treat these kinds of machines as pieces of technology or as something more?)
- [Project Hail Mary](#), by Andy Weir (Summary: A wild tale about a high school science teacher who wakes up in a different star system with no memory of how he got there. The rest of the story is all about how he uses science and engineering to save the day.)

## Best Book (Fiction) — winner



### [Project Hail Mary](#), by Andy Weir

COP26 delegates were desperately looking for an energy "Hail Mary." Maybe Weir's book could have served as inspiration?

## Energy and/or Environment (related) Song of the Year — nominees

(Note: some of the nominated songs may contain inappropriate language; with apologies, the editorial board listened to each song but was not able to understand all of the lyrics.)

- [5500 Degrees](#) - EST Gee (rap)
- [Blast Off](#) - Bruno Mars, Anderson .Paak (R&B/soul)
- [Cold As You](#) - Luke Combs (country)
- [Cold Heart](#) - Elton John and Dua Lipa (pop)
- [Fellowship](#) - serpentwithfeet (pop)
- [Hot](#) - Meek Mill (rap)
- [Hot & Heavy](#) - Lucy Dacus (rock)
- [Lights Up](#) - Flight Facilities & Channel Tres (Australian pop)
- [Off the Grid](#) - Kanye West & playboi carti (rap)
- [Solar Power](#) - Lorde (alternative/indie)
- [Seeing Green](#) - by Nicki Minaj, Drake & Lil Wayne (R&B/rap)
- [Shivers](#) - by Ed Sheeran (pop)
- [You're Mines Still](#) - Yung Bleu, featuring Drake (R&B)
- [Your Power](#) - Billie Eilish (techno pop)

## Energy Song of the Year — winner

### [Solar Power](#), by Lorde



## Energy-inspired Art/Artist of the Year

Winner: [End of Life Solar](#), by Katie Repsis



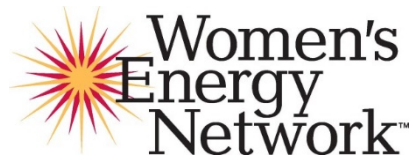
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