

NGO SUSTAINABILITY

GLOBAL WARNING

LATEST NEWS IN SUSTAINABILITY +
NO. 132 | July 2022

PROMOTING SUSTAINABLE LIVING AND RENEWABLE ENERGY FOR THE FUTURE OF OUR PLANET
ngosustainability@gmail.com / unngosustainability.org

“Like music and art, love of nature is a common language that can transcend political or social boundaries.”
—Jimmy Carter

Hazel Henderson



Photo: The New York Times

Hazel Henderson was a British-American, self-taught environmentalist and futurist who became an apostle of the green economy. A prolific writer, Henderson authored nine books and hundreds of articles often cited as controversial by conventional economists. However, Henderson is best known for forecasting the need for the current transition away from fossil fuels in her 1981 groundbreaking book, “The Politics of the Solar Age”. Her other published works include “Building

a Win-Win World”, “Beyond Globalization”, and “Ethical Markets: Growing the Green Economy”. Many of her economic critiques have been fundamental in the modern environmental movement. She co-founded Citizens for Clean Air, a NYC-based environmental group which helped to standardize air pollution indexes in daily weather reports. After an illustrious career of over 40 years, Hazel passed away on May 22nd, 2022, at the age of 89.



Photo: *Jamie Ryan*

“Polar Heart” By Simon Barraclough

Simon Barraclough is a freelance writer who studied at the University of Nottingham and the University of Sussex. Specializing in creative and technical fields, he has published poems and other works in magazines such as *Poetry Review* and *The Manhattan Review*, and his work has been broadcasted on BBC Radio. He currently lives in London.

*Opposites attract.
Perhaps.
In fact: in fact.
But the whole wide world
bulges between us:
overfed, underfed,
and will not be denied.
We know, we've tried.
My love expands for six dark months
while yours retracts
to rally again
as mine melts away for half a year.
I know we have to stay so far apart,
I know the climate needs our hopeless pas de deux
but sometimes at the solstice
I yell “Screw this!”
into the polar gale
and another ice shelf fails.*

“Calculating The (Not So) Hidden Cost of Living On The Coast” *Forbes*, by Louis Gritzso



Photo: Getty Images

With over 40% of the United States’ population living near the ocean, many millions of people are vulnerable to future flooding events due to climate change. Many coastal cities in the United States are already experiencing climate change impacts today, including higher relative sea levels and 300% - 900% more frequent high-tide flooding events compared to 50 years ago. In spite of these inherent risks, people continue to move to the coast and increase development. These new projects often do not properly account for future climate impacts, and taxpayers are forced to pay the associated costs. While there are short and long-term solutions available, they do not address the main cause of the issue. Rather, sustainable land development is needed that accounts for long-term financial costs and greater awareness of the true risks associated with living close to the ocean.

[Full Article](#)

“Forbes Global 2000 Firms Judged ‘Alarming Weak’ On Climate Plans”

Forbes, by David Vetter



Photo: Getty Images

A recent report written by the Net Zero Tracker collaboration found that the majority of companies on Forbes’ Global 2000 list have not set zero-emissions targets to address climate change, and those that have show a “troubling lack of clarity” on how they plan to address them. Firms responsible for higher levels of emissions (such as oil companies) were more likely to announce emissions targets, but only 38% actually cover “Scope 3” emissions, which account for a product's disposal. Additionally, they are more likely to be symbolic, ranging from vague promises to outright greenwashing. The report’s release coincides with recent scrutiny of the S&P’s ESG index, as their criteria does not account for Scope 3 emissions. This has led to many companies being misrepresented as more environmentally conscious than they actually are.

[Full Article](#)

“EV charging: Biden says he’ll tap infrastructure money to standardize payment methods, fill gaps” *MarketWatch* by Rachel Koning Beals



Photo: Getty Images

The Biden administration plans to allocate \$7.5 billion from the recently passed infrastructure law to standardize the 500,000 additional EV charging stations it hopes to build to offset emissions from gas-powered vehicles. The chargers must abide by a strict set of standards in order to maximize reliability and customer convenience. This initiative is increasingly reliant on private-sector investments in order to build charging stations that can adequately follow those standards while easing consumer fears related to EV charging infrastructure. Although their goals fall way short of the total number of chargers needed to fully replace combustion vehicles, it is a good start that will hopefully kickstart a greater use of EVs nationwide.

[Full Article](#)

“Exclusive-U.S. automaker CEOs, Toyota urge Congress to lift EV tax credit cap” *Reuters*, by David Shepherdson



Photo: Kim Kyung-Hoon

Executives from several automakers including Ford, Toyota, and GM wrote a letter to Congress urging to lift the cap on the \$7,500 EV federal tax credit, citing concerns with high costs of EV production. The current government credit phases out after a firm produces more than 200,000 EVs. This renders select companies including GM and Tesla ineligible to receive credit, while Toyota and Ford are expected to hit their caps later this year. The letter is a response to growing fears that the window to extend EV credits is closing, especially given the possibility of a Republican takeover of Congress during the midterms. With billions of dollars being invested in EV development across multiple companies, many executives are hoping to receive government assistance in order to facilitate their expansion into the EV market and lessen the cost for consumers.

[Full Article](#)

“We beg God for water’: Chilean lake turns to desert, sounding climate change alarm”

Reuters, by Alexander Villegas and Rodrigo Gutierrez



Photo: Ivan Alvarado

A historic 13-year drought has reduced the once plentiful Peñuelas Reservoir in central Chile into nothing more than small puddles. Higher air and sea temperatures have disrupted natural weather cycles, leading to below average snowfall in the Andes and less water availability for local communities. Water levels in the reservoir have reached levels not seen in decades, leading to unprecedented water rationing policies in order to distribute remaining resources. Researchers at the University of Chile have predicted a 30% loss of water resources in Chile over the next 30 years, and further studies have shown the climate is shifting towards more frequent drought events that will increasingly grow in scale and duration. Until further action is taken to curb emissions, locals have resorted to praying for water in the hopes that something will change.

[Full Article](#)

“Reforming Coral Reefs Using 3D Printing”

ScienceDaily, by Bar-ilan University



Photo: Great Barrier Reef Foundation

Global warming and accelerated urbanization in coastal areas have become the two main factors leading to the large die-off of large portions of coral reefs in many areas. To help keep coral reef ecosystems thriving, researchers from four of Israel’s top universities have discovered the use of a 3D printing method that can help to restore existing reefs. The process first scans underwater photographs of coral reefs to help create a three-dimensional model. Then through a molecular method, environmental genetic information is collected. With all of this data, large scale marine rehabilitation is applied and can help keep damaged coral reef systems alive. Through the restructuring and rebuilding of a seemingly natural and complex coral reef, reef species can return and occupy the artificially 3D built ones and keep thriving.

[Full Article](#)

“Death of Bats At Wind Turbines Interrupts Natural Food Chains” *ScienceDaily*, by Leibniz Institute for Zoo and Wildlife Research (IZW)



Photo: REVE Magazine

Wind turbines are being constructed on agriculture and forest monocultures in Germany, and scientists are studying their impacts on local bat populations. Bats play an integral role in forestry and agriculture, consuming prey that are considered pests like moths and the chestnut weevil. Researchers analyzed 17 noctules that were killed from collisions with wind turbines with PCR amplification, and analyzed the genetic barcodes of the insects the bats ate. They found that the death of bats was negatively affecting the natural food chain, as smaller bat populations contribute to a trophic cascade in the populations of prey species. While turbines can help with climate change mitigation and biodiversity preservation, further studies are needed to understand the role bats have to disturbances of our ecosystems.

[Full Article](#)

“Fish Leather is Here, It’s sustainable - and it's made from invasive species to boot” *The Guardian* by Richard Luscombe



Photo: Yuri Cortéz

Lionfish are a devastating invasive species wreaking havoc on coral reefs, killing over 79% of fish species. Originating in the Pacific Ocean, they are highly venomous and have practically no predators. Aarav Chavda has come up with a way to make the hunting of these fish profitable. He has discovered a way to turn lionfish into a high quality fish leather. The lionfish hides are tanned outside and then dyed and sold into high end fashion products like wallets, belts, and handbags. Fish leather is more sustainable to produce since animal leathers require large amounts of pasture for grazing and raising the animals. The lionfish are plentiful in the Atlantic Ocean where they are invasive in that region and their fish leather is far less impactful on the environment.

[Full Article](#)

Each week, our interns at NGO Sustainability choose special topics of interest to report on. We believe our interns should explore issues they are passionate about within the sustainability field and we look forward to sharing some of the most interesting aspects of this work with you. Here is Intern Kamille's Report on Marine Protected Areas.

Marine Protected Areas (MPAs)

Worldwide, coastal ecosystems have been historically threatened by multiple sources, including economic development, agricultural runoff, and land use associated with urbanization. To mitigate damages from anthropogenic sources, Marine Protected Areas (MPAs) offer a refuge for species to repopulate and provide levels of protection to marine resources and ecosystems. A majority of countries have committed to protecting 10% or more of marine and coastal locations across the globe as of 2020. Conservation outcomes of MPAs can be through ecological connectivity/representation and incorporation into the larger marine area, as well as effective and equitable management.

The United Nations has established policy guidelines and frameworks to ensure natural resources are protected and managed. One of the primary purposes of the UN Convention on the Law of the Sea (UNCLOS) was to set legal precedent for sustainable management of maritime resources. The agreement indirectly established MPA guidelines through defining the Exclusive Economic Zones (EEZs) of member nations, in which they could establish their own protected areas under their jurisdiction (The United Nations 1982). Additionally, the UN has been responsible for various non-binding resolutions including the Rio Declaration on Environment and Development, the Johannesburg Plan of Implementation, and SDG 14 of the 2030 Sustainable Development Goals. To ensure that the UN is sufficiently addressing the issues of biodiversity and inadequate resource management, a working group meets every few years to review past resolutions and recommend necessary modifications (UNDOALOS, n.d.).

There are 19 ecoregions in the United States encompassing about 26% of US federal waters. U.S. MPAs have provided protection to valuable marine ecosystems, with 80% of biologically-diversity hotspots like shallow tropical corals contained within their borders. Additionally, seagrasses and mangroves that provide ecosystem services like storm surge mitigation, erosion protection and flood moderation are protected at 63% and 83%, respectively. The majority of the MPAs in the United States are concentrated in the Pacific Ocean, off the coasts of California and Hawaii. The Pacific Islands region comprises 47% of U.S. waters and of that percentage, 52.1% are protected in MPAs (Wenzel et al. 2020). In Hawaii, the Papahānaumokuākea Marine National Monument has threatened and endangered species like the Hawaiian monk seal and the biggest breeding colony of tropical seabird rooks (Papahānaumokuākea Marine National Monument 2020). These MPAs have established ecological connectivity, a concept involving the linkages between distinct populations and ecosystems with a clear exchange of nutrients. While ecological connectivity increases the effectiveness and stability of an MPA, most of the United States' protected areas were created with specific conservation targets and varying management approaches. However, progress is being made to increase the connectivity between different MPAs (Wenzel et al. 2020).

India has also created MPAs within its waters, totaling 8214 square kilometers over 24 sites, providing numerous ecological benefits. There are four areas of protection: Wildlife Sanctuaries, Conservation Reserves, Community Reserves and National Parks. The largest marine protected area is Sajnakhali in the state of West Bengal with 2091.12 square kilometers, established in 1976. More research is needed on marine species conservation statuses to help the Whale Shark, corals, Dugong, sea turtles and sponges. Although MPAs in India have proven successful in restoring depleted natural resources and sustaining fragile ecosystems, their coastal waters are still under threat from human activities. (Kuppusamy, Mathur, and Pande 2014)

References

- Kuppusamy, Sivakumar, Vinod Mathur, and Anant Pande. 2014. *Coastal and Marine Protected Areas in India: Challenges and Way Forward*. 15th ed.
- https://www.researchgate.net/publication/265642777_Coastal_and_Marine_Protected_Areas_in_India_Challenges_and_Way_Forward.
- UNDOALOS. n.d. "Marine biological diversity of areas beyond national jurisdiction: Legal and policy framework." Accessed July 12, 2022.
- https://www.un.org/depts/los/biodiversityworkinggroup/webpage_legal_and_policy.pdf.
- The United Nations. 1982. *The United Nations Convention on the Law of the Sea*.
- https://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf.
- "Papāhanaumokuākea Marine National Monument." *Papāhanaumokuākea Marine National Monument*. 2020.
- Wenzel, Lauren, Mimi D'lorio, Charles Wahle, Gonzalo Cid, Zachary Cannizzo, and Katherine Darr. 2020. "Marine Protected Areas 2020: Building Effective Conservation Networks." National Marine Protected Areas Center.
- <https://nmsmarineprotectedareas.blob.core.windows.net/marineprotectedareas-prod/media/docs/2020-mpa-building-effective-conservation-networks.pdf>.

Producer: Roma Stibravy, President

Editors: Tanatswa Gawe(Hofstra University), Ben Parker (Colgate University)

Contributors: NGO Sustainability Interns

BECOME A MEMBER OF NGO SUSTAINABILITY!

ungosustainability.org

CORPORATE SPONSORSHIP ALSO AVAILABLE