

SUSTAINALANYC

Sustainability Newsletter

FALL/WINTER 2025

VOLUME 7





Action of the Month Challenge

Elba Cortes, Fox Rothschild LLP

Pack lunches that create no trash. Use reusable containers, cloth napkins, and metal utensils instead of disposables.

Why it matters: The average school-age child’s lunch generates 67 pounds of packaging waste per year. Going zero-waste saves money and cuts pollution.

Your challenge:

- Prep lunches with reusables only.
- Swap single-serve snacks for bulk buys in small containers.

Share a photo of your zero-waste lunchbox and tag our social media profiles, we’ll share our favorites!

Fall & Winter Sustainability Holidays

OCTOBER

October 1: World Vegetarian Day

October 1: Energy Efficiency Day

October 4: World Animal Day

October 6: World Habitat Day

October 11: World Migratory Bird Day

October 16: World Food Day

October 28: Sustainability Day

October 24: International Day of Climate Action

NOVEMBER

November 1: World Vegan Day

November 6: International Day for Preventing the Exploitation of the Environment in War and Armed Conflict

November 15: America Recycles Day*

November 17: Take a Hike Day*

DECEMBER

December 5: World Soil Day

December 11: International Mountain Day

Breakthroughs in Water Conservation Technology

Elba Cortes, Fox Rothschild LLP

Water scarcity is one of the greatest challenges of our time. With global demand expected to outpace supply by 40% by 2030, innovations in water conservation technology are offering fresh hope. Here are some of the most exciting breakthroughs making waves:

1. Smart Irrigation Systems

Agriculture accounts for nearly 70% of global freshwater use. Smart irrigation sensors and AI-driven systems now allow farmers to monitor soil moisture in real time, applying water only when and where it's needed. This reduces waste by up to 50% while boosting crop yields.

2. Atmospheric Water Harvesting

Imagine pulling drinking water straight from the air. New devices use solar power to extract moisture—even in arid climates. Scalable models are being developed to provide clean water for off-grid communities where wells or pipelines aren't viable.

3. Wastewater Recycling

Advanced filtration and membrane technologies are transforming wastewater into safe, reusable water. Cities from Singapore to San Diego are pioneering "toilet-to-tap" systems, reducing dependence on reservoirs and groundwater.

4. Leak-Detecting Smart Pipes

Aging water infrastructure loses billions of gallons every year through leaks. Smart pipe networks, equipped with sensors, can now detect pressure changes, and pinpoint leaks instantly, saving cities money and conserving water.

5. Desalination 2.0

Traditional desalination has been energy-intensive and costly. Breakthroughs in graphene-based membranes and low-energy distillation are making it more efficient, opening doors for affordable large-scale use in coastal regions.

These innovations aren't just about conserving water—they're about ensuring resilience in the face of climate change. By combining technology, policy, and community action, we can safeguard one of our planet's most precious resources.





Quick Brief: Climate Week NYC 2025 - Power On

Gayatri Joshi, Vorgate Impact

Climate Week NYC 2025, held September 21-28 to annually coincide with the UN General Assembly, unfolded with the theme of “Power On” calling for leaders and industries to move from commitments to implementing climate action plans. The annual event takes place every year in partnership with the United Nations General Assembly and is run in coordination with the United Nations and the City of New York with over 900 events held city-wide along 10 themes, Built Environment, Energy, Environmental Justice, Finance, Food, Industry, Nature, Policy, Sustainable Living, and Transport. Bringing together leaders from business, government and communities, issues such as industrial decarbonization, clean energy demand and climate finance were at the forefront and reinforced that progress is increasingly driven by the private sector. Notable high impact events from Climate Week included Nest Climate Campus, a large-scale hub of keynotes, co-hosted events, experiential learning activations on topics like technology and energy demands, strategy and AI, circular transformations, as well as the MIT Innovation Showcase & Panels on climate-tech breakthroughs. These discussions will likely influence the agenda at COP30 in Brazil this November.

Legal standouts on the agenda were the Sabin Center for Climate Change Law relaunching its US & Global Climate Litigation Databases, Climate Contracting for In House Lawyers, The Professional Duty of Lawyers and Bar Association on Climate, Earth Law Colloquium: Aligning Our Laws with Nature’s Laws, and Environmental Marketing Claims and the Law: Navigating a Rapidly Shifting Landscape.

Legal administrators should note that climate narratives are shifting from pledges and commitments to action. “Power On” is a call to turn on solutions. Policy, finance and corporate strategy are shaping climate resilience. Firms should be prepared to support their internal operations and their clients with climate-aligned financial strategies, compliance with ESG frameworks and risk-informed legal and business strategies. The emphasis on technology, including AI and infrastructure, highlights the accelerating role of governance and the need for policy development, contracts and litigation preparedness. In this evolving landscape, legal administrators play a critical role in ensuring their firms are not only compliant, but also equipped to lead through the legal, strategic, and operational dimensions of the climate transition.

Read more about the Climate Week NYC 2025 events: <https://www.climateweeknyc.org/>

Sustainable Products Corner: Patagonia

Elba Cortes, Fox Rothschild LLP



This issue's featured product is Patagonia.

Patagonia is a bit different from the other companies because it's privately held—not publicly traded—so it isn't included in big sustainability indexes like the Dow Jones Sustainability Index or Corporate Knights Global 100.

However, it's often cited as one of the most sustainable apparel companies in the world because of the way it integrates sustainability into its entire business model:

Repair & Reuse Programs: Their Worn Wear program encourages customers to repair clothing instead of replacing it, extending product life and cutting waste.

Activism & Advocacy: Patagonia uses its brand voice (and profits) to support environmental causes, even taking legal action to protect public lands.

Ethical Supply Chains: They emphasize fair labor practices and transparency in sourcing materials.

Materials & Design: Heavy investment in organic cotton, recycled polyester, and innovative low-impact fabrics.

Ownership Structure: In 2022, the founder transferred ownership to a trust and nonprofit to ensure profits are reinvested into environmental protection, not shareholders.

So while Patagonia won't show up on formal "most sustainable companies" rankings, it's frequently highlighted in sustainability discussions because it sets the bar for mission-driven, values-first business practices.

See Time's list of most sustainable companies in 2025. <https://time.com/collection/worlds-most-sustainable-companies-2025/>

Sustainable Recipe Corner: Vegan Pumpkin Smoothie

Oria Aponte, ALANYC Vice President



Why not start your day with this super easy and nutritious smoothie! It's made with just a handful of ingredients and is done in less than 5 minutes.

The ingredients are:

- 1 cup pumpkin puree
- 1 med frozen banana
- 1 cup plant based milk
- 1 heaping tbs of almond butter
- ¾ tsp of pumpkin spice

Put all ingredients in a blender and blend until well combined. Serve and sprinkle with a little cinnamon for flair. It makes a great drink for a fall brunch or a fall movie night. Enjoy!



What's Hiding in Your Inbox & Cloud Storage

Gayatri Joshi, Vorgate Impact

A very large footprint might be hiding in your inbox...I'm referring to carbon..and water. We often think of emails and cloud storage as something indistinct or intangible, even though it's part of how we exist. Hardly an hour goes by before the urge or need to send an email or text, but each message sent carries a measurable environmental cost in the form of carbon emissions, energy, water, resource extraction and land loss.

The cost of the email you sent earlier, it was the energy equivalent of running a 60-watt light bulb for 2-3 minutes. Now imagine leaving it on for an entire year. It's estimated that the average office worker receives 121 emails a day. Over the course of the year, that adds up to 136 kg of CO₂ for one person, just for email.



Footprint of One Email:

Size of Email	CO ₂ Per Email	CO ₂ Per Year	Est. Water Use
Simple Text Email (No Attachments)	0.3 g	5.4 kg (11.9 lbs)	1-20 microliters
Longer Email (1MB)	19 g	342 kg (754 lbs)	40-80 microliters
Emails with Large Attachments (10 MB)	194 g	3500 kg (7,726 lbs)	10-100 microliters

Footprint of Cloud Storage:

Cloud Storage	CO ₂ Per Year	Est. Water Use
1 GB in Cloud	0.4 kg	.07 liters
100 GB in Cloud	4 kg	7 liters
1 TB in Cloud	40 kg	70 liters

With billions of terabytes in the cloud, it is a significantly expanding global issue. Global data centers account for 1% of all global energy use and the demand is rising, projected to 3-8% by 2030.



Factors that influence your email's carbon and overall footprint:

Devices. The electricity used by your laptop or smartphone to read and send emails contributes to the footprint. The more powerful the device, the more energy it might consume. The battery type and the charging efficiency also affect the overall footprint; battery mining for lithium and cobalt has intense environmental impacts, especially at the beginning and end-of-life cycle.

Data Centers. Data centers consume incredible amounts of energy to store and process email data. Cooling systems used to prevent overheating, adding to both energy and water consumption. Some estimate 11-19 liters of water daily. There are other hidden costs in the construction of data centers, such as the energy, water and land clearing required to build the data centers. Some estimates put a data center construction at 150,000 tons of concrete, 10,000 of steel and 30 million liters of water, exponentially increasing the overall footprint. This does not include the estimated 2.7 million tons of e-waste generated annually from data centers for the rapid replacement cycle of equipment.

Network Infrastructure. Transmitting emails through internet service providers and networks, using power for routers, servers and other equipment requires energy. The total energy needed is difficult to measure, but every step of sending, routing and storing requires power.

Email Attachments & Volume. Larger attachments require more energy to store and transmit. The more emails sent, the more energy consumed. This includes everyone copied on an email. Ten more recipients means ten more transmissions through the network and ten more emails that are stored. This is compounded by the length of time emails are kept in your inbox.

10 Tips to Reduce Your Email and Cloud Storage Footprint

Delete Old Emails. The more emails you store, the more energy and resources are consumed to maintain those records.

Keep It Concise. Be succinct in your email, avoid replying all or copying everyone on an email if it is not necessary.

Limit or Compress Attachments. Use cloud-based file-sharing platforms. Instead of sending a large 10MB file as an attachment, share it as a link. This reduces email size and storage.

Optimize Cloud Storage. Only store necessary files. Regularly review, delete and archive files you no longer need or don't need immediate access.

Switch to Energy-Efficient Devices. Choose devices with Energy Star ratings or with higher efficiency rates. When possible use solar-powered chargers.

Choose Green Hosting. When choosing your cloud storage or hosting service, consider providers that use renewable energy or have committed to reducing carbon emissions.

Choose Energy Efficient Data Centers. Choose companies that invest in sustainable infrastructure like low carbon technology, renewable energy or water-efficient cooling systems.

Optimize Email Marketing. Be mindful of how often and how relevant the content is to your audiences. Use HTML formatting to reduce file size and include links to content rather than attaching files.

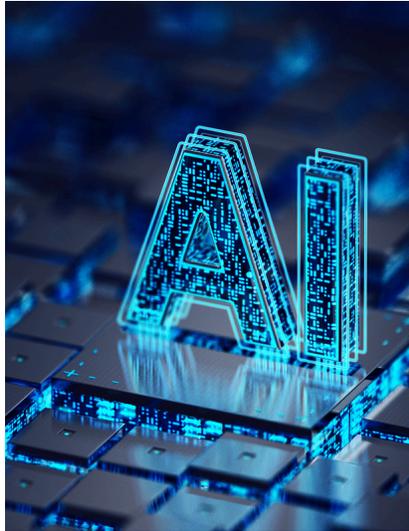
Turn Off Devices and Cloud Syncing. When Not in Use. When you're not actively using your devices or cloud storage, turn off cloud syncing or put devices in power-saving mode. This will help reduce energy consumption of data transfers.

Unsubscribe & Report Spam. Actively unsubscribe from email lists you no longer need. Also mark spam to help your spam filter block unwanted email and reduce overall volume of emails. It's estimated that over 100 billion spam emails are sent per day, that's approximately 30,000 metric tonnes of CO2 produced per day.

You don't need to be tech-savvy to reduce your email and cloud footprint. Unsubscribe, delete, store less and send smarter. In a world of billions of messages, one small change makes more impact than you think. A lighter inbox can help the planet and your sanity will thank you!

The Environmental Paradox of Artificial Intelligence: Balancing Innovation with Sustainability

Camille Gallardo, Ellis Law Group LLC



Artificial intelligence (“AI”) has rapidly transformed society, powering everything from search engines to autonomous vehicles. This technological revolution brings remarkable benefits, enhancing productivity and solving complex problems. However, beneath these achievements lies a growing environmental concern. While AI has transformative potential to address global challenges, its environmental impact poses serious sustainability challenges that must be weighed against its benefits.

Resource-Intensive Training and Operations

Training sophisticated AI models requires enormous computational resources, translating into massive energy consumption. Data centers housing AI infrastructure often rely on non-renewable energy sources such as water, contributing significantly to carbon emissions. Research shows that training a single large AI model can emit as much carbon dioxide as several cars produce over their entire lifetime. For instance, training GPT-3 generated over 500 tons of CO₂-equivalent emissions.

Beyond training, daily AI operations create substantial environmental costs. Everyday applications—chatbots, recommendation engines, voice assistants—continuously consume energy at massive scales. Search engines process billions of queries daily, social media platforms use AI for content recommendation, and the proliferation of AI-powered features across digital services amplifies global energy demand exponentially.

Water Consumption and Electronic Waste

AI data centers require sophisticated water-intensive cooling systems to prevent processors from overheating. These facilities can consume millions of gallons daily, creating stress on local ecosystems, particularly in drought-prone regions where many data centers are located. Communities facing water scarcity find themselves competing with tech companies for this essential resource. A recent example of this was the denial of Project Blue, a large data center campus proposed for the Tucson area by Beale Infrastructure, which was unanimously rejected by the Tucson City Council in August 2025.

The relentless pace of AI advancement drives constant hardware upgrades. Graphics processing units, tensor processing units (“TPUs”), and servers have shortened lifecycles as new generations offer performance improvements. AI hardware is often replaced within two to three years, contributing substantially to the growing global electronic waste problem with its toxic substances and valuable, but poorly recycled materials.

Environmental Impact: Short- and Long-Term Effects

The immediate consequences of AI's expansion are already apparent. Greenhouse gas emissions from the technology sector have increased substantially, while electricity demand often outpaces renewable energy transitions. Local communities near data centers experience strain on energy grids, water supplies, and land use, with environmental costs frequently borne by vulnerable communities.

Long-term implications present even greater concerns. The technology industry faces a lock-in effect, where massive investments in energy-hungry infrastructure create incentives to maintain environmentally costly systems. The global e-waste problem will likely escalate as AI hardware operates under constant upgrade pressure. Most critically, unchecked AI expansion could undermine climate change mitigation efforts by diverting renewable energy capacity from communities to corporate data centers.

AI's Potential for Sustainability

Despite its environmental costs, AI offers unprecedented opportunities for sustainability. Smart-grid technologies optimize electricity distribution, reduce waste, and integrate renewable energy sources. Machine learning identifies energy savings in industrial processes and buildings that would be difficult, nearly impossible, for humans to detect.

AI serves as a powerful climate change mitigation tool, providing accurate climate predictions and enabling better disaster response. In agriculture, precision farming guided by AI algorithms dramatically reduces water, fertilizer, and pesticide use while maintaining crop yields. The logistics sector benefits from AI-powered route optimization that minimizes fuel consumption and reduces transportation emissions.

Growing environmental awareness is driving innovation in sustainable AI approaches. Researchers are developing energy-efficient algorithms that achieve similar performance with lower computational requirements. Major technology companies increasingly commit to renewable energy for data centers, while exploring novel approaches like underwater facilities and strategic location in renewable-rich regions.

What's Next?

The relationship between artificial intelligence and environmental sustainability represents a defining challenge of our technological age. AI embodies both our greatest environmental threat and most promising solution—a paradox demanding thoughtful navigation. The technology's capacity to optimize systems and solve complex problems offers unprecedented tools for addressing climate change, yet its computational demands pose serious risks to environmental goals.

The path forward requires responsible innovation prioritizing green AI development, renewable energy adoption, and ethical resource allocation. This means designing AI systems with environmental impact as a primary consideration, investing in renewable infrastructure supporting technological growth, and ensuring equitable distribution of AI's benefits and burdens across global communities.

The choices we make today about AI development, deployment, and regulation will determine whether this transformative technology catalyzes environmental protection or drives ecological destruction. The future of AI must be deliberately aligned with the future of our planet—not as competing priorities, but as inseparable elements of human progress.

Five Sustainable Swaps That Save Money (and the Planet)

Elba Cortes, Fox Rothschild LLP

Living more sustainably doesn't have to mean a complete lifestyle overhaul—or spending more money. In fact, some of the simplest swaps not only reduce your environmental footprint but also help your wallet in the long run.

Here are five practical changes you can start today:

1

Reusable Water Bottles Over Single-Use Plastic

The average person uses over 150 single-use plastic bottles per year. Investing in a durable reusable bottle cuts waste, keeps microplastics out of waterways, and saves you \$200+ annually.

2

LED Bulbs Instead of Incandescent

LEDs use 75% less energy and last up to 25 times longer than traditional bulbs. Switching your home lighting can cut electricity bills while lowering your household's carbon emissions.

3

Cloth Towels Over Paper Towels

Americans use around 13 billion pounds of paper towels each year. A set of washable cloth towels or old t-shirts repurposed as rags can eliminate recurring purchases and reduce deforestation.

4

Thrifted & Secondhand Fashion Instead of Fast Fashion

The fashion industry is one of the largest polluters globally. Shopping secondhand saves money, reduces textile waste, and helps extend the life of clothing already in circulation.

5

Meal Planning to Prevent Food Waste

Nearly 40% of food in the U.S. goes uneaten. Planning meals ahead reduces grocery costs, cuts down on waste, and ensures you only buy what you truly need.



Sustainability Hack of the Month

Try a “no-buy” week—commit to using what you already have at home before purchasing anything.

Celebrating a More Sustainable Hanukkah

Lisa Gilbert, *Ivionics*

When I was asked to write about how to celebrate a more sustainable Hanukkah, I thought—what a great opportunity! As someone who’s Jewish, this topic felt personal and meaningful. It got me thinking not just about how we celebrate, but why we celebrate in the first place.

Before diving into eco-friendly tips, let’s take a moment to revisit the story behind Hanukkah.

Hanukkah, also known as the Festival of Lights, commemorates the victory of the Maccabees—a small group of Jewish fighters—over the Syrian Greeks in 164 BCE. The Greeks had taken control of the Holy Land and tried to force the Jewish people to adopt Greek customs and abandon their faith. Led by Judah the Maccabee, the Maccabees reclaimed the Holy Temple in Jerusalem.

When they went to light the Temple’s menorah, they found only a tiny amount of olive oil that hadn’t been contaminated. Miraculously, that small supply lasted eight full days. That’s why today, we light the menorah for eight nights, enjoy traditional foods, play games like dreidel, and exchange gifts.

Now, with that beautiful history in mind, here are some easy ways to make your Hanukkah celebration a little more earth-friendly:



Eco-Friendly Candles

Use beeswax or plant-based candles for your menorah—they burn cleaner than paraffin wax. Another alternative would be LED lights for a flameless, energy-saving option.

Sustainable Decorations

Get creative with recycled materials! Make menorahs or dreidels from things around the house like toilet paper rolls or flowerpots. You could also invest in reusable decorations made from glass, metal, or ceramic.

Local & Seasonal Foods

Choose locally grown produce like potatoes and onions to reduce your carbon footprint. If you’re frying latkes, let the oil cool and solidify before tossing it. Alternatively, you could add your used natural oil to your compost pile, mixing it in, and throwing it back in the freezer until it’s ready to be disposed of. Additionally, recycle foil wrappers when you can. Organic oil is a great choice too.

Thoughtful Gift Giving

Reuse gift bags or turn your kids’ artwork into homemade wrapping paper. Instead of buying more stuff, consider giving experiences—like cooking classes, spa days, or tickets to a show or sporting event. Homemade treats or crafts also make heartfelt gifts.

Reusable Tableware

Skip the disposable plates and cups. Use real dishes or compostable options made from bamboo or other plant-based materials.

Making small changes like these can have a big impact—and help create a healthier planet for future generations. Wishing you a joyful, meaningful, and sustainable Hanukkah!



Meet the ALANYC Sustainability Team

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