

NEWS ROUNDUP 07 JANUARY 2025 [08:00 am]

- Above normal rainfall, more tropical cyclones expected in Q1 2025 due to La Niña: PAGASA
- Run-of-river hydro excluded from 3rd green energy round
- Repression of climate and environmental protest is intensifying across the world
- Clean energy, electric cars, climate: What will Trump do?
- Tropical island nations face a land crisis
- Where the smart climate tech venture money is going in 2025
- LGUs urged to address garbage woes, strengthen waste mgmt efforts
- Climate crisis 'wreaking havoc' on Earth's water cycle, report finds

ABS CBN

Above normal rainfall, more tropical cyclones expected in Q1 2025 due to La Niña: PAGASA

By: Rose Carmelle Lacuata

State weather bureau PAGASA on Monday said there may be higher chances of above normal rainfall in the first quarter of 2025 as sea surface temperatures reached La Niña conditions threshold in December 2024.

BUSINESS WORLD

Run-of-river hydro excluded from 3rd green energy round

By: Sheldeen Joy Talavera

THE Department of Energy (DoE) said it has dropped run-of-river hydro from the third round of the green energy auction (GEA-3), which will be delayed to next month.

CLIMATE HOME NEWS

Repression of climate and environmental protest is intensifying across the world By: Oscar Berglund and Tie Franco Brotto

Climate and environmental protest is being criminalised and repressed around the world. The criminalisation of such protest has received a lot of attention in certain countries, including the UK and Australia. But there have not been any attempts to capture the global trend – until now.

DW

Clean energy, electric cars, climate: What will Trump do?

By: Martin Kuebler

As President-elect Donald Trump hustles to assemble his governing team, environmental analysts have been looking for signs of what to expect from his second term. And for many, the outlook is bleak.

ECO BUSINESS

Tropical island nations face a land crisis

By: You Xiaoying

Luxurious resorts, pristine beaches and lush forests define the popular image of tropical islands. But behind this idyllic facade, a quiet land crisis is unfolding, compounding the threat posed by rising sea levels.

JAPAN TIMES

Where the smart climate tech venture money is going in 2025

By: Brian Kahn

This year is shaping up to be a dramatic one for climate tech investors. Donald Trump's return to the White House is set to shift the U.S. landscape, with the possible rollback of key provisions in the Inflation Reduction Act, Energy Department loans drying up and weaker regulations. Beyond the U.S., the prospect of more trade wars is scrambling the economy in ways that will determine which climate tech sectors to bet on.

PHILIPPINE NEWS AGENCY

LGUs urged to address garbage woes, strengthen waste mgmt efforts By: Marita Moaje

The Department of Environment and Natural Resources (DENR) has reminded local government units (LGUs) to strictly enforce Republic Act No. 9003, or the Ecological Solid Waste Management Act of 2000, amid growing concerns over uncollected trash in Metro Manila following the New Year festivities.

THE GUARDIAN

Climate crisis 'wreaking havoc' on Earth's water cycle, report finds

The climate crisis is "wreaking havoc" on the planet's water cycle, with ferocious floods and crippling droughts affecting billions of people, a report has found.

Information and Knowledge Management Division

ABS CBN

Above normal rainfall, more tropical cyclones expected in Q1 2025 due to La Niña: PAGASA

By: Rose Carmelle Lacuata

State weather bureau PAGASA on Monday said there may be higher chances of above normal rainfall in the first quarter of 2025 as sea surface temperatures reached La Niña conditions threshold in December 2024.

According to PAGASA, the periods of cooler than average sea surface temperatures in the equatorial Pacific Ocean that started in September 2024 continued to persist and further strengthened in December 2024.

PAGASA also said the La Niña may continue until March 2025, which may bring higher chances of above normal rainfall.

"With this development, higher chances of above normal rainfall in January – February - March 2025 season is expected, which may cause floods, flashfloods and rain-induced landslides," it said.

There might also be increased chance of tropical cyclone activity within the Philippine area of responsibility within the same period.

La Nina refers to a naturally occurring climate phenomenon that cools the ocean surface temperatures in large swathes of the tropical Pacific Ocean, coupled with winds, rains and changes in atmospheric pressure.

In many locations, especially in the tropics, La Nina produces the opposite climate impacts to El Nino, which heats up the surface of the oceans, leading to drought in some parts of the world and triggering heavy downpours elsewhere.

BUSINESS WORLD

Run-of-river hydro excluded from 3rd green energy round

By: Sheldeen Joy Talavera

The Department of Energy (DoE) said it has dropped run-of-river hydro from the third round of the green energy auction (GEA-3), which will be delayed to next month.

"The DoE will exclude the run-of-river (RoR) hydro from GEA-3 in view of the ongoing Feed-In-Tariff (FIT) System for RoR Hydro, which to date remain undersubscribed," the department said in a statement at the weekend.

Consequently, the Energy Regulatory Commission (ERC) will no longer release the green energy auction reserve price, or the ceiling price used in the auction, for RoR.

Run-of-river, a technology initially offered in the GEA, is also eligible for FIT.

GEA and FIT programs are both designed to promote renewable energy. GEA conducts competitive bidding to determine prices, whereas FIT offers fixed rates set by the government.

Both programs are aimed at increasing the share of renewable energy in the power generation mix.

"The DoE will continue supporting and providing appropriate market mechanisms for RoR Hydro and other emerging RE technologies," it said.

With the exclusion of RoR, the DoE is set to offer non-FIT eligible technologies such as geothermal, impounding hydro, and pumped-storage hydro with a total capacity of 4,650 megawatts (MW).

The government will auction 100 MW worth of geothermal capacity, 300 MW of impounding hydro, and 4,250 MW of pumped-storage hydro.

The auction proper for GEA-3 is scheduled on Feb. 11.

ERC Chairperson and Chief Executive Officer Monalisa C. Dimalanta confirmed the exclusion of RoR, saying that the commission had to defer a resolution on the GEA price of RoR due to the issue of "parallel implementation" of the FIT and GEA.

"We were asking if it's possible to actually to parallel programs because (RoR) has FIT... Then the DoE decided to retain it under FIT so we will now sit down and discuss a revision to the FIT rate," Ms. Dimalanta said at a briefing on Monday.

The government held the first GEA in 2022, auctioning off 1,996.93 MW worth of renewables, while the second round was concluded in 2023, auctioning off 3,440.756 MW.

CLIMATE HOME NEWS

Repression of climate and environmental protest is intensifying across the world By: Oscar Berglund and Tie Franco Brotto

Climate and environmental protest is being criminalised and repressed around the world. The criminalisation of such protest has received a lot of attention in certain countries, including the UK and Australia. But there have not been any attempts to capture the global trend – until now.

We recently published a report, with three University of Bristol colleagues, which shows this repression is indeed a global trend – and that it is becoming more difficult around the world to stand up for climate justice.

This criminalisation and repression spans the global north and south, and includes more and less democratic countries. It does, however, take different forms.

Our report distinguishes between climate and environmental protest. The latter are campaigns against specific environmentally destructive projects – most commonly oil and gas extraction and pipelines, deforestation, dam building and mining. They take place all around the world.

Climate protests are aimed at mitigating climate change by decreasing carbon emissions, and tend to make bigger policy or political demands ("cut global emissions now" rather than "don't build this power plant"). They often take place in urban areas and are more common in the global north.

Four ways to repress activism

The intensifying criminalisation and repression is taking four main forms.

1. Anti-protest laws are introduced

Anti-protest laws may give the police more powers to stop protest, introduce new criminal offences, increase sentence lengths for existing offences, or give policy impunity when harming protesters. In the 14 countries we looked at, we found 22 such pieces of legislation introduced since 2019.

2. Protest is criminalised through prosecution and courts

This can mean using laws against climate and environmental activists that were designed to be used against terrorism or organised crime. In Germany, members of Letzte Generation (Last Generation), a direct action group in the mould of Just Stop Oil, were charged in May 2024 with "forming a criminal organisation". This section of the law is typically used against mafia organisations and had never been applied to a non-violent group.

In the Philippines, anti-terrorism laws have been used against environmentalists who have found themselves unable to return to their home islands.

Criminalising protest can also mean lowering the threshold for prosecution, preventing climate activists from mentioning climate change in court, and changing other court processes to make guilty verdicts more likely. Another example is injunctions that can be taken out by corporations against activists who protest against them.

3. Harsher policing

This stretches from stopping and searching to surveillance, arrests, violence, infiltration and threatening activists. The policing of activists is carried out not just by state actors like police and armed forces, but also private actors including private security, organised crime and corporations.

In Germany, regional police have been accused of collaborating with an energy giant (and its private fire brigade) to evict coal mine protesters, while private security was used extensively in policing anti-mining activists in Peru.

4. Killings and disappearances

Lastly, in the most extreme cases, environmental activists are murdered. This is an extension of the trend for harsher policing, as it typically follows threats by the same range of actors. We used data from the NGO Global Witness to show this is increasingly common in countries including Brazil, Philippines, Peru and India. In Brazil, most murders are carried out by organised crime groups while in Peru, it is the police force.

Protests are increasing

To look more closely at the global picture of climate and environmental protest – and the repression of it – we used the Armed Conflicts Location Event database. This showed us that climate protests increased dramatically in 2018-2019 and have not

declined since. They make up on average about 4% of all protest in the 81 countries that had more than 1,000 protests recorded in the 2012-2023 period:

We used this data to see what kind of repression activists face. By looking for keywords in the reporting of protest events, we found that on average 3% of climate and environmental protests face police violence, and 6.3% involve arrests. But behind these averages are large differences in the nature of protest and its policing.

A combination of the presence of protest groups like Extinction Rebellion, who often actively seek arrests, and police forces that are more likely to make arrests, mean countries such as Australia and the UK have very high levels of arrest. Some 20% of Australian climate and environmental protests involve arrests, against 17% in the UK – with the highest in the world being Canada on 27%.

Meanwhile, police violence is high in countries such as Peru (6.5%) and Uganda (4.4%). France stands out as a European country with relatively high levels of police violence (3.2%) and low levels of arrests (also 3.2%).

In summary, while criminalisation and repression does not look the same across the world, there are remarkable similarities. It is increasing in a lot of countries, it involves both state and corporate actors, and it takes many forms.

This repression is taking place in a context where states are not taking adequate action on climate change. By criminalising activists, states depoliticise them. This conceals the fact these activists are ultimately right about the state of the climate and environment – and the lack of positive government action in these areas. The Conversation

Clean energy, electric cars, climate: What will Trump do?

By: Martin Kuebler

As President-elect Donald Trump hustles to assemble his governing team, environmental analysts have been looking for signs of what to expect from his second term. And for many, the outlook is bleak.

Donald Trump, an avowed climate skeptic, has made no secret of his plans for his second presidency.

On the campaign trail and since his reelection, he has pledged to boost fossil fuel exploitation, cancel tax credits for electric vehicles and clean energy projects, unravel environmental regulations, and claw back unspent funds from what he has called the "green new scam," landmark climate legislation passed by outgoing President Joe Biden.

Trump's rhetoric has echoed many proposals outlined in Project 2025, a 900-page playbook by the ultraconservative Heritage Foundation. Though Trump publicly distanced himself from the plan, several authors have been nominated for key positions.

They include Russ Vought, who as a top budget official would help set the administration's priorities and who, in Project 2025, stressed the overarching importance of the "president's agenda."

'A very destructive administration'

"We have no illusions that this is going to be a very destructive administration," said Rachel Cleetus, the policy director for climate and energy at the US-based Union of Concerned Scientists (UCS). "They are anti-science at their core."

Cleetus said she had yet to see any indication from the incoming government that it would use accepted climate research to "help guide good policymaking" and act in the public interest.

"Instead of independent judgment and expertise, there's a lot of almost cult-like loyalty to a president who has taken a very sharp posture against clean energy, completely beholden to fossil fuel interests," she told DW.

DW

And with both chambers of the Republican-controlled Congress and the conservativemajority Supreme Court likely on the president's side, at least until the midterm elections in 2026, Cleetus said there were "very few barriers" left to resist Trump's plans.

"All of that together, it's a very sobering landscape," she said.

Budget cuts, weakened laws at Environmental Protection Agency

Trump's pick to head the Environmental Protection Agency (EPA), former New York congressman Lee Zeldin, consistently opposed environmental protection and clean energy investments during his time in office. An NGO tracking political support for green policies gave him a 14% score for his voting record.

Announcing his pick on November 11, the president-elect said Zeldin would help "unleash the power of American businesses, while at the same time maintaining the highest environmental standards, including the cleanest air and water on the planet."

As EPA head, Zeldin is expected to target many strict new rules introduced by the Biden administration, covering everything from air and water pollution to drilling, biodiversity, and toxic substances — a repeat of what Trump ordered the EPA to do when he took over from Barack Obama in 2017.

"They talk about clean air and clean water, but they're [planning] to roll back all of these [...] pollution standards that are specifically designed to protect people's health and protect the environment," said Cleetus. "They're talking about slashing budgets, attacking staffing in all of these agencies."

Mandy Gunasekara, the EPA's chief of staff during Trump's first presidency and a contributing author to Project 2025, told The New York Times in October that the plan for Trump's second term would be to "tear down and rebuild" its structures. During Trump's first presidency, the agency saw its budget stagnate and had to contend with losing more than 1,100 employees, many demoralized by the weakening or removal of more than 100 environmental rules.

Leading environmental groups have criticized Zeldin's nomination, with Ben Jealous, executive director of US environmental organization, the Sierra Club, saying it "lays bare Donald Trump's intentions to, once again, sell our health, our communities, our jobs, and our future out to corporate polluters."

"We need a steady, experienced hand at EPA to marshal federal resources to fight climate change and utilize the full power of the law to protect communities from toxic pollution," Abigail Dillen, president of the nonprofit environmental law organization Earthjustice, said in a statement on November 12. "Lee Zeldin is not that person."

'Drill, baby drill!'

A key focus of Trump's campaign was his vow to turbocharge the extraction of planetheating fossil fuels — which has already raked in record profits in recent years. Like Project 2025, he has spoken of restoring America's energy independence and promised voters he will "cut your energy prices in half."

Chris Wright, a climate skeptic and Trump's nominee to head the Department of Energy, is CEO of Liberty Energy, a power generation company focused on fracking and natural gas. He has enthusiastically touted the benefits of hydrocarbons like coal, oil, and gas, writing in a January 2024 company report that there was "no such thing as 'clean' or 'dirty' energy."

"Trump is stacking his administration with executives from some of the largest fossil fuel corporations," wrote the Sierra Club on its website. "They want to loosen regulations, roll back clean energy progress, and destroy our planet for their profit."

Congratulating Trump on his victory on November 6, Tim Tarpley, president of the Energy Workforce & Technology Council trade association, said he anticipated the new administration would move quickly to increase fracking on federal land and speed up permits for oil and gas projects, including in the Gulf of Mexico.

Trump to target clean energy, electric cars

Renewable energy projects and electric vehicles (EVs) will also be in the crosshairs come January. Trump is looking to undo federal mandates to reduce vehicle emissions and billions in consumer tax credits for clean energy projects and electric cars, part of Biden's 2022 Inflation Reduction Act — even though clean energy and EV projects have created tens of thousands of new jobs in the last few years.

Industry analysts, however, believe it won't be easy for Trump to follow through on his plans to gut the IRA. Some of the funds are already invested in projects across the country — lithium extraction operations in California, solar panel plants in Texas, and factories making batteries and electric cars in Georgia — and despite Republican criticism of the legislation, well-paying jobs do enjoy some bipartisan support.

Nearly 60% of the clean energy projects announced since 2022 are in Republican congressional districts, according to a September 2024 report from E2, a nonprofit that advocates for environmental economic policies — in states like Georgia, North Carolina, South Carolina, Michigan, Arizona, and Indiana, which all backed Trump in the election. These projects are expected to add more than \$400 billion to US gross domestic product in the coming years.

Highlighting the boom in renewable energy in places like China, India, and Brazil, Cleetus said any reversal of the IRA provisions would be "destructive" and risk that "the US will be left behind in this global clean energy revolution," with supply chains being set up elsewhere.

"I think there would be a lot of opposition from state and local entities, from businesses, from workers," she said.

Climate issues increasingly hard to ignore

While the raft of changes under Trump have alarmed environmental experts, Cleetus said it won't happen overnight. "There are many things that can't be undone just by the stroke of a pen," she said, citing the complex regulatory and administrative process, not to mention legal challenges. "We can expect legal avenues to be very active under the Trump administration."

And even with Trump planning a slew of executive orders on his first day, which would require no approval from Congress, legislation or legal challenges could delay how they come into effect.

Cleetus added that the US may also not find it so easy to ignore environmental issues the second time around, both at home and on the international stage — especially with Trump preparing to pull out of the Paris agreement again.

"Climate has now become a top-tier issue in global diplomacy," she said, pointing out the increasingly complex ties to trade, security, and economic issues. "Many, many developing countries, lower income countries are facing just absolutely catastrophic impacts from climate change. And so the US will find it difficult to separate its geopolitical interests from climate."

ECO BUSINESS

Tropical island nations face a land crisis

By: You Xiaoying

Luxurious resorts, pristine beaches and lush forests define the popular image of tropical islands. But behind this idyllic facade, a quiet land crisis is unfolding, compounding the threat posed by rising sea levels.

Land degradation – a phenomenon most associated with dry regions of Africa and Central Asia – is also occurring in tropical island nations. When land degrades, soil loses its productivity, biodiversity and overall health, which can lead to food shortages and forced migration.

Small Island Developing States (Sids) is a UN-recognised group comprising 39 states and 18 associate members. Sids are "among the most vulnerable countries to land degradation due to their physical nature, small size and escarped landscapes," according to a 2020 UN report. The issue is also reaching critical levels among larger island nations, such as Indonesia.

Island nations "have to balance the provision of food and all the other services that come from nature", Barron Orr, chief scientist of the UN Convention to Combat Desertification (UNCCD), tells Dialogue Earth. "Ensuring that there is integrity of the land and the soil is key."

Drivers of the crisis

At the recent UNCCD COP16 in Riyadh, Saudi Arabia, the convention's executive secretary, Ibrahim Thiaw, warned that "every second, somewhere in the world, we lose an equivalent of four football fields to land degradation." For island nations with limited landmass, the impact can be more pronounced.

Eric Browne, the UNCCD's focal point in Saint Kitts and Nevis, tells Dialogue Earth: "If we have a drought, it's the whole island that is affected. If we have a flood, we can't run away."

In the Philippines, nearly half the country's land - 14.26 million hectares - was degraded in 2019, according to the UNCCD. Halfway across the globe in the Dominican Republic, more than one third of the land - 1.49 million hectares - was similarly affected that year.

"Islands are usually pictured as paradise," says Estrella Penunia, secretary general of the Asian Farmers' Association for Sustainable Rural Development. But Penunia, who is based in Manila, says in her country "decades of neglect over agriculture, and the exploitation of natural resources, are now threatening our lands and soils." Human activities such as unsustainable logging and mining cause the problem.

Climate change further compounds the issue, disrupting once-reliable alternations between dry and wet seasons.

"The distribution and the amount of rainfall have changed," says Chay Asdak, a professor of the management of watersheds at Universitas Padjadjaran in Indonesia. In some areas rainfall has increased, while in others it has diminished.

The misuse of synthetic fertilisers also plays a role, says Orr. "The good news of fertilisers is you give immediate food to your plants and they grow. The bad news is, by short-circuiting all of that natural biology, you lose many other factors that are important for healthy soils."

Synthetic fertilisers also reduce the land's ability to absorb flood waters, because the organic matter that is necessary for soil to hold water is lost. "If it happens to an island developing state, that can be very serious," he continues. "It can really impact how well that system responds to drought and to flooding."

Threats of desertification

Desertification is land degradation in dry areas. Surprisingly, it is a threat to tropical islands that have mountainous terrain, due to a scientific concept called the "orographic effect".

The phenomenon occurs when wind blowing from the sea to an island is forced to rise over a mountain. As the wind climbs the slope, it cools and forms clouds, leading to rainfall on the sea-facing side of the mountain. But the opposite side gets little rain as the wind descends and warms up.

"You end up with a very dry environment on the other side of these mountains," Orr explains. "If we have degradation in those dry areas, now we are facing the risk of desertification."

In the mountainous parts of Indonesia, orographic rainfall can also trigger landslides on slopes and flooding in low-lying areas.

According to Asdak, deteriorating soil and rising urbanisation is making it harder for rainwater to seep through the ground in wet seasons, which increases the chances of seasonal drought.

In Trinidad and Tobago, the situation is similar. Poor farming practices and quarrying are the leading causes of land degradation there. As climate change brings more intense and shorter periods of rain in the wet season, land degradation leads to faster water flows, which overwhelm the island's small river systems and make the soil more vulnerable.

The dry season, on the other hand, is also becoming longer and more intense. According to David Persaud, an environmental manager at the Ministry of Planning and Development of Trinidad and Tobago, this is straining water supplies and forcing reliance on seawater desalination. His country experienced "the worst drought in recent memory" this year, forcing the government to ration water for months.

"Increasing demand and competition for land uses as the population grows, such as for housing, agriculture and other development areas, compounds these challenges," Persaud tells Dialogue Earth.

Actions needed

Addressing these challenges requires "financing and capacity building," says Browne of Saint Kitts and Nevis. He works as a forestry officer in the country's Ministry of Environment, Climate Action and Constituency Empowerment.

Browne says providing people with the knowledge to look after their soil and deal with land degradation and drought is vital. "How is my soil doing? What crops are most suited for us in dealing with drought? We need research on these," he says.

Better land-management practices can make "a big difference" for small island nations, Orr explains. "If we don't plant thirsty crops, we have more water available. And if we put the biology back in our soil, so we have organic matter, we increase more crop per drop."

Another priority is to improve the global dataset for monitoring and assessing land degradation in small island nations. This is something these countries have underscored repeatedly. The lack of data also makes it hard for the global audience to "quantify and visualise" the intensity of land degradation and drought in these countries, says Praveena Sridhar, chief technical officer of the Save Soil movement.

Over the past few years, the UNCCD has supported Small Island Developing States by helping them to access high-resolution imagery and data. This can better prepare them for the future.

The effort is part of a programme to help them achieve "land degradation neutrality" by 2030 – a target of the UN's Sustainable Development Goals. But for many islanders, including Browne, more help is needed because the situation on the ground is getting "very serious".

The good news is, action is being taken. During COP16 in Riyadh, nearly 200 countries reached an agreement. They requested the UNCCD and the Global Mechanism – which facilitates the mobilisation of financial resources – to work with their partners to ensure the accuracy and consistency of high-resolution land data. This applies especially to Sids and other developing countries confronting this growing crisis.

JAPAN TIMES

Where the smart climate tech venture money is going in 2025

By: Brian Kahn

This year is shaping up to be a dramatic one for climate tech investors. Donald Trump's return to the White House is set to shift the U.S. landscape, with the possible rollback of key provisions in the Inflation Reduction Act, Energy Department loans drying up and weaker regulations. Beyond the U.S., the prospect of more trade wars is scrambling the economy in ways that will determine which climate tech sectors to bet on.

Meanwhile, headwinds for hydrogen are throwing doubt on its viability, and artificial intelligence is now fully on investors' radars.

Climate-tech equity raising has also dipped dramatically to an estimated \$43 billion in 2024 from more than \$127 billion in 2022, according to BloombergNEF. Still, market intelligence firm Sightline Climate estimates investors have roughly \$86 billion in unspent cash, giving them the latitude to make big bets if they want.

Bloomberg Green spoke with a dozen investors and analysts about what's ahead for carbon-cutting startups and what they'd like to buy, sell and hold.

Buy

AI Solutions

Tourist investors who poured cash into green technologies flocked to AI last year, and their climate-tech counterparts aren't far behind. There are two huge AI and climate opportunities: figuring out how to cut the technology's emissions and using AI itself to reduce carbon pollution.

Al's massive power demand is scuttling tech companies' net-zero goals, and they've been searching for carbon-free solutions ranging from the germane to the gamechanging. Major data center operators are "creating transformative commercial opportunities for frontier climate technologies like nuclear fusion," said Monica Varman, a partner at G2 Venture Partners.

BNEF research shows that nuclear startups are a rare bright spot, with funding in 2024 surpassing 2023. Fusion is years away at best, however, and there are options now to cut emissions on the cheap. Solar can be the "backbone" for running data centers on

electrons, said Blair Pritchard, a partner at Australia-based Virescent Ventures. "But you need tech to manage the intermittency of solar and pair it with storage."

Yet, even though AI is still in its infancy, startups are already using it to hone in on materials that are key for the energy transition. There's "room for the cost curve to come down rapidly" for materials that capture carbon in particular, said Melvyn Yeo, founder and managing partner at Singapore-based climate tech firm Trirec.

Al could also help manage the unruly power grid it's putting so much strain on, particularly in how to deal with more extreme weather. Overhauling the grid will cost \$811 billion annually by 2030 in order to reach net zero, according to BNEF. Al would allow utilities to optimize their approach, saving money and labor, said Blue Bear Capital founding partner Ernst Sack.

National security plays

Climate tech stands a good chance of surviving and even thriving under a Trump administration. Just don't use the c-word. Ahead of the election, startups were already considering rebranding as defense tech.

Now, that's likely to kick into overdrive. It helps that there are areas where national security overlaps with clean tech in a near-perfect Venn diagram, such as the production of critical minerals, steel and semiconductors.

"These are massive global markets worth trillions, and we see currently a golden window to win these markets and ensure stability and prosperity," said Sarah Sclarsic, a founding partner of Voyager Ventures.

Sack concurred, noting this convergence of priorities "will accelerate as we all look to energize the American economy and establish energy dominance."

Growth-stage companies

The valley of death between prototype and commercialization has earned its name for a reason. In recent years, promising companies ranging from carbon removal startup Running Tide to electric bus maker Proterra have met their demise there.

"We need a tenfold increase in the rate at which we are building first-of-a-kind commercial facilities for critical climate tech," said Rushad Nanavatty, head of climate tech accelerator Third Derivative.

VC firms are looking to step in to help more mature companies grow. BNEF data shows there's been a marked dip in initial public offerings and public financing since 2022. But that hasn't deterred investors from looking for companies ready to go commercial and some firms have even raised funding specifically for growth-stage startups.

"There are a number of climate technology startups hitting commercial inflection points," said Varman of G2 Ventures, and the firm has money to spend "to help bridge that 'missing middle' of financing."

Sell

Green hydrogen

The pullback on hydrogen began in earnest last year, and investors see it continuing in 2025. Countries scaled back their ambitions to produce and use the gas, which can be carbon-free if it's produced using water and renewable energy.

BNEF recently revised its forecast to find the gas will remain stubbornly expensive over the coming decades, costing as much as \$5.09 per kilogram. That's why "we continue to see some of the challenges in the sector," said Dhanpal Jhaveri, chief executive officer of Eversource Capital.

In short, hydrogen demand "did not catch up with the hype" in 2024, said Yeo. This year could see the bubble deflate even further.

Direct air capture

Startups using machines to pull carbon dioxide from the air have seen a flurry of activity in recent years. That includes nine-figure fundraises; major corporate purchases; and billions in U.S. government support.

But it costs hundreds of dollars to extract each ton of carbon and the energy requirements are huge. While the world will need some form of carbon removal and direct air capture technology has so far been a darling of the 2020s, it's unclear if it will deliver the billions of tons of CO2 needed in the coming decades. The "uncertain" economics will prove a challenge to the technology, said Sebastian Pollok, founding partner at VC firm Visionaries Tomorrow.

Hold

Decarbonizing buildings

Buildings are responsible for nearly 40% of global greenhouse gas emissions and would seem a smart sector to place a few green bets. The trouble is, that's exactly what's happened. While there's still money to be made for investors, startups — particularly those offering carbon-cutting software — are going to need to make the case for "why they stand out and can dominate the competition," said Pritchard from Virescent Ventures.

Hardware companies also face challenges. Though heat pumps have seen widespread adoption in developed economies, installations have dipped across Europe. Emerging economies are a huge untapped market, but companies will need to showcase "innovative approaches" to spur adoption, said Tien Nguyen, founding partner at Vietnam-based Earth Venture Capital.

Demand for other technologies that can help cut rising utility bills from batteries to rooftop solar also makes it a sector worth holding, even in the U.S. and the prospect of reduced federal incentives. "People have already changed how their households use and control energy," said Elta Koliou, a senior associate at the Ad Hoc Group, which provides support to clean tech startups. "That momentum doesn't die just because there's someone new in the White House."

Sustainable agriculture

Like buildings, agriculture is the source of a huge chunk of emissions. It also represents a giant market for carbon-cutting solutions, and a plethora of startups are trying to fill it by offering everything from crop-tending drones to nitrogen-producing microbes. (G2 has invested in Pivot Bio, which does the latter.)

The issue, though, is that Big Ag is so entrenched that it can be hard for startups to break through — even if the products they offer are cheaper. Costs can still win the day, though, and the "potential to tap into large value pools" makes it a sector worth holding, said Pollok from Visionaries Tomorrow.

PHILIPPINE NEWS AGENCY

LGUs urged to address garbage woes, strengthen waste mgmt efforts By: Marita Moaje

The Department of Environment and Natural Resources (DENR) has reminded local government units (LGUs) to strictly enforce Republic Act No. 9003, or the Ecological Solid Waste Management Act of 2000, amid growing concerns over uncollected trash in Metro Manila following the New Year festivities.

In a statement on Monday, the DENR emphasized that proper waste management is vital to safeguarding public health and protecting the environment.

"RA 9003 mandates LGUs to craft, implement, and enforce solid waste management plans approved by the National Solid Waste Management Commission (NSWMC)," the DENR said.

Although 89 percent of LGUs nationwide—1,416 out of 1,592, including all 17 in Metro Manila— having submitted and received approval for their plans, the DENR urged local officials to step up their efforts.

It also vowed to provide technical assistance to LGUs struggling with implementation.

Improper waste disposal has long plagued the country, causing environmental damage, health hazards, and worsening urban flooding.

Over the weekend, Manila Mayor Honey Lacuna criticized its waste management contractor for abandoning its responsibilities during the holiday season, but was vehemently denied by the garbage collector firm, citing the Dec. 31, 2024 expiration of its contract.

THE GUARDIAN

Climate crisis 'wreaking havoc' on Earth's water cycle, report finds

The climate crisis is "wreaking havoc" on the planet's water cycle, with ferocious floods and crippling droughts affecting billions of people, a report has found.

Water is people's most vital natural resource but global heating is changing the way water moves around the Earth. The analysis of water disasters in 2024, which was the hottest year on record, found they had killed at least 8,700 people, driven 40 million from their homes and caused economic damage of more than \$550bn (£445bn).

Rising temperatures, caused by continued burning of fossil fuels, disrupt the water cycle in multiple ways. Warmer air can hold more water vapour, leading to more intense downpours. Warmer seas provide more energy to hurricanes and typhoons, supercharging their destructive power. Global heating can also increase drought by causing more evaporation from soil, as well as shifting rainfall patterns.

Deadly flash floods hit Nepal and Brazil in 2024, while river flooding caused devastation in central Europe, China and Bangladesh. Super Typhoon Yagi, which struck south-east Asia in September, was intensified by the climate crisis, as was Storm Boris which hit Europe the same month.

Droughts also caused major damage, with crop production in southern Africa halving, causing more than 30 million people to face food shortages. Farmers were also forced to cull livestock as their pastures dried up, and falling output from hydropower dams led to widespread blackouts.

"In 2024, Earth experienced its hottest year on record and water systems across the globe bore the brunt, wreaking havoc on the water cycle," said the report's leader, Prof Albert van Dijk.

He said 2024 was a year of extremes but that was not an isolated occurrence. "It is part of a worsening trend of more intense floods, prolonged droughts, and record-breaking extremes." The report warned of even greater dangers in 2025 as carbon emissions continued to rise .

The 2024 Global Water Monitor Report was produced by an international team of researchers from universities in Australia, Saudi Arabia, China, Germany and elsewhere.

The team used data from thousands of ground stations and satellites orbiting the Earth to assess critical water variables such as rainfall, soil moisture, river flows, and flooding.

They found rainfall records are being broken with increasing regularity. For example, record highs for monthly rainfall were set 27% more often in 2024 than in the year 2000 and daily rainfall records were set 52% more frequently. Record lows were set 38% more often. "So we are seeing worse extremes on both sides," said Van Dijk.

In southern China from May to July, the Yangtze and Pearl rivers flooded cities and towns, displacing tens of thousands of people and causing hundreds of millions of dollars of damage to crops. The river floods in Bangladesh in August after heavy monsoon rains affected almost 6 million people and destroyed at least a million tonnes of rice.

Meanwhile, in Spain in October more than 500mm of rain fell in eight hours, causing deadly flash floods. The city of Porto Alegre, Brazil, was inundated with two months' worth of rain in just three days in May, transforming roads into rivers.

"Heavy rainfall events also caused widespread flash flooding in Afghanistan and Pakistan, killing more than 1,000 people," Van Dijk said. The flooding also displaced 1.5 million people.

In the Amazon, drought struck. "Wildfires driven by the hot and dry weather burned through more than 52,000 sq km in September alone, releasing vast amounts of greenhouse gases," Van Dijk said. "From historic droughts to catastrophic floods, these extreme events impact lives, livelihoods, and entire ecosystems."

The researchers said seasonal climate forecasts for 2025 and current conditions suggested droughts could worsen in northern South America, southern Africa, and parts of Asia. Wetter regions such as the Sahel and Europe may face elevated flood risks.

"We need to prepare and adapt to inevitably more severe extreme events," said Van Dijk. "That can mean stronger flood defences, developing more drought-resilient food production and water supplies, and better early warning systems. Water is our most critical resource, and its extremes – both floods and droughts – are among the greatest threats we face."

=END=