ECOLENCE INTELLIGENCE
THE ENVIRONMENTAL INVESTMENT BRIEFING

ISSUE 001
SEPTEMBER 25, 2026

The Infrastructure Behind the Environmental Economy

Energy, grids, water, natural capital and environmental technology are moving closer to the center of the investment conversation.



THE BIG PICTURE

Why environmental investing is increasingly becoming an infrastructure story

5 THINGS TO KNOW

The week's most important environmental investment developments

CAPITAL FLOWS

Where capital is moving — and what it may tell us

SECTOR WATCH

Energy • Water
Natural Capital
Carbon • Technology

FROM ECOLENCE

Introducing the 2027 Environmental Investment Outlook

INTELLIGENCE TODAY. IMPACT TOMORROW.

ECOLENCE INTELLIGENCE
THE ENVIRONMENTAL INVESTMENT BRIEFING

ISSUE 001
SEPTEMBER 25, 2026

The Infrastructure Behind the Environmental Economy



For years, much of the environmental investment conversation centered on individual technologies and companies: solar manufacturers, electric vehicles, clean-energy developers and other businesses associated with the transition toward a more resource-efficient economy.

That investment universe is becoming considerably broader.

Increasingly, some of the most consequential environmental investment needs involve the physical systems underlying the economy itself: electrical grids, water systems, renewable-energy infrastructure, storage, agricultural systems, natural resources and the technologies used to operate, monitor and improve those assets.

This shift matters because infrastructure changes the investment conversation. Rather than focusing only on which technologies may grow, investors increasingly need to consider what must actually be built, financed, modernized and operated for those technologies—and the economies surrounding them—to function.

The Grid Illustrates the Challenge

Electricity provides perhaps the clearest example.

The International Energy Agency estimates that more than 2,500 gigawatts of renewable generation, storage and large-load projects are currently stalled in grid-connection queues worldwide.

At the same time, annual global grid investment is approximately **$400 billion**. The IEA estimates that meeting electricity demand through 2030 would require annual grid investment to increase by approximately **50%** from today's level.

The challenge is not simply generating more electricity. It is connecting generation to consumers, managing increasingly complex power flows, integrating storage, serving new sources of demand such as data centers, and maintaining reliability as electricity becomes increasingly important across the economy.

There is also a timing problem. The IEA notes that new grid infrastructure can take approximately **5–15 years** to plan, permit and complete, compared with roughly 1–5 years for solar and wind projects and 1–3 years for data centers.

That mismatch helps explain why the next stage of environmental investment may increasingly focus on the infrastructure surrounding the technology—not simply the technology itself.

Water Tells a Similar Story

Water infrastructure provides another example of environmental need becoming a financing question.

On September 18, the U.S. Environmental Protection Agency announced a **$251 million WIFIA loan** supporting the Las Virgenes-Triunfo Pure Water Project in California.

The project will use advanced water purification to recycle wastewater, recharge a drinking-water source, improve system reliability and strengthen resilience to drought and wildfire.

It is one transaction, but it illustrates a broader point.

Water scarcity may be an environmental problem. Aging treatment facilities may be an infrastructure problem. Water reuse may be a technological solution.

But implementing that solution ultimately becomes a **capital formation problem.**

KEY FIGURES

2,500 GW
of renewable generation, storage and large-load projects are stalled in grid-connection queues worldwide.
Source: International Energy Agency

$400 BILLION
Annual global grid investment today.
Source: International Energy Agency

50%
Increase in annual grid investment needed through 2030.
Source: International Energy Agency

5 – 15 YEARS
Time to plan, permit and complete new grid infrastructure (compared with 1–5 years for solar and wind and 1–3 years for data centers).
Source: International Energy Agency

New Markets Are Beginning to Meet Traditional Finance

The same convergence is beginning to appear in newer environmental markets.



Carbon Removal

This week, carbon-removal company Vaulted Deep secured up to **$35 million** in debt financing from Mediobanca to support expansion in the United States.



Natural Capital

Brazilian reforestation company **Mombak** announced the first close of its second Amazon reforestation fund, which is targeting **$150 million**, alongside access to a roughly **$39 million** credit line from Brazil's Climate Fund.



Distributed Clean Energy

Nigeria launched a **$300 million** Distributed Renewable Energy Fund this week aimed at expanding off-grid electricity access.

Different countries. Different assets. Different investment structures.

But a common thread runs through them: **Environmental need increasingly requires capital, infrastructure and investable financial structures.**

The Ecolence Take

The environmental investment opportunity is therefore becoming less about identifying a single winning environmental theme and more about understanding the systems surrounding those themes.

For investors, this creates a larger—and more complicated—investment universe.

The question increasingly becomes not simply:

"Which environmental sectors will grow?"

But:

"Where will capital be required to build the systems that growth depends upon?"

That distinction may become one of the defining characteristics of environmental investing heading into 2027.

ECOLENCE INTELLIGENCE
THE ENVIRONMENTAL INVESTMENT BRIEFING

ISSUE 001
SEPTEMBER 25, 2026



5 THINGS TO KNOW

The Week in Environmental Investment

SEPTEMBER 18 – 25, 2026

Environmental investment activity this week illustrates a theme that runs throughout our inaugural issue: capital is increasingly being deployed not only toward environmental technologies, but toward the **infrastructure, financing structures and physical assets needed to put those technologies to work.**



01 The Grid Is Becoming an Investment Bottleneck

More than **2,500 GW** of renewable generation, storage and large-load projects are currently stalled in grid-connection queues worldwide, according to the International Energy Agency. The IEA estimates that annual grid investment, currently around **$400 billion**, would need to increase by approximately **50% by 2030** to meet forecast electricity demand.

WHY IT MATTERS

The clean-energy investment story is expanding beyond generation. Transmission, distribution, storage, grid-enhancing technologies and digital infrastructure may become increasingly important parts of the environmental investment universe.



02 $251 Million Moves Into Water-Reuse Infrastructure

The U.S. Environmental Protection Agency announced a **$251 million WIFIA loan** for the Las Virgenes-Triunfo Pure Water Project in California. The project will construct advanced water-purification infrastructure designed to recycle wastewater, strengthen local water supplies and improve resilience to drought and other disruptions.

EPA says its WIFIA program has now provided approximately **$24 billion** in credit assistance supporting roughly **$52 billion** of water infrastructure projects.

WHY IT MATTERS

Water illustrates how environmental challenges can translate into infrastructure requirements—and how public financing mechanisms can help mobilize capital toward long-lived physical assets.



03 Private Credit Enters Carbon Removal

Carbon-removal company **Vaulted Deep** secured up to **$35 million** in **debt financing** from Mediobanca to support its U.S. expansion. Debt financing has remained relatively uncommon in the developing carbon-removal industry, making the transaction notable.

Vaulted Deep uses a process that takes organic waste streams, including agricultural residues and biosolids, and injects resulting material underground for long-term carbon storage.

WHY IT MATTERS

Emerging environmental industries often depend heavily on equity and venture capital during their early development. The availability of debt financing can signal another stage in market developicent—but the economics, counterparties and durability of underlying revenues remain critical.



04 Natural Capital Attracts New Fund Capital

Brazilian reforestation company **Mombak** announced the first close of its second Amazon reforestation fund, which is targeting **$150 million**.

The fund also has access to a 200 million Brazilian real—approximately **$39 million**—credit line from Brazil's Climate Fund. Mombak additionally announced a multiyear carbon-credit purchase agreement with Salesforce.

WHY IT MATTERS

The transaction demonstrates how natural-capital strategies can combine several forms of capital and revenue: private fund investment, credit facilities, land-based projects and environmental commodities. It also reinforces an important distinction: the environmental value of a project and its investment economics must still be evaluated independently.



05 Nigeria Launches $300 Million Distributed Renewable Energy Fund

Nigeria launched a **$300 million** Distributed Renewable Energy Fund this week, moving the initiative from planning toward capital deployment. The fund is backed by the country's sovereign wealth fund and is intended to expand off-grid electricity access, particularly in underserved areas.

WHY IT MATTERS

Some of the largest environmental infrastructure opportunities may develop in markets where centralized infrastructure remains insufficient. Distributed energy can potentially address both electricity access and infrastructure constraints—but emerging-market investments can also carry currency, political, regulatory, execution and counterparty risks.

THE COMMON THREAD

Capital is moving across very different environmental markets—but the common requirement is increasingly the same: credible projects, investable structures and infrastructure capable of turning environmental need into economic activity.

GRID | WATER | CO_2 CARBON REMOVAL | NATURAL CAPITAL | DISTRIBUTED ENERGY

Sources: International Energy Agency; U.S. Environmental Protection Agency; Axios; Reuters. Data and announcements current through September 25, 2026.

ECOLENCE INTELLIGENCE
THE ENVIRONMENTAL INVESTMENT BRIEFING

ISSUE 001
SEPTEMBER 25, 2026

WHERE CAPITAL IS MOVING



The environmental investment landscape is expanding beyond traditional public markets.

For years, environmental investing was often associated primarily with publicly traded renewable-energy companies, clean-technology stocks and ESG-focused funds.

That landscape is becoming much broader.

Increasingly, private capital is being deployed into **real assets, infrastructure, technology and operating businesses** connected to the transition toward a more efficient and resilient economy.

FIVE AREAS TO WATCH

SUSTAINABLE AGRICULTURE

Farmland, regenerative agriculture, precision farming and agricultural technology are attracting investment as investors look for exposure to productive real assets and long-term food demand.



CLEAN ENERGY & INFRASTRUCTURE

Solar, wind, battery storage, grid modernization and distributed-energy projects continue to require significant private capital for development and expansion.



WATER

Aging infrastructure, water scarcity and growing demand are creating opportunities across treatment, conservation, irrigation, wastewater and water technology.



CIRCULAR ECONOMY

Recycling, resource recovery, advanced materials and waste-to-value businesses are developing new economic models around materials traditionally treated as waste.



NATURE & ENVIRONMENTAL ASSETS

Forestry, ecosystem restoration, biodiversity, conservation and environmental commodities are creating emerging investment models tied directly to natural assets.



THE BIGGER SHIFT

The important development isn't any single sector.

It's the expansion of the investable environmental economy itself.

Investors are increasingly able to look beyond public equities and consider opportunities connected directly to land, infrastructure, resources, technology and environmental projects.

That shift could significantly expand where private capital participates in the environmental economy over the coming decade.

ECOLENCE INTELLIGENCE

Tracking the investments, sectors and ideas shaping the environmental economy.

TECHNOLOGY WATCH

THE GRID MAY BE GETTING SMARTER BEFORE IT GETS BIGGER



Building new transmission infrastructure can take years.

But one of the most interesting developments in energy infrastructure is the growing use of technologies designed to extract more capacity from the grid infrastructure that already exists.

These are broadly known as **grid-enhancing technologies**, or **GETs**.

Rather than simply constructing new transmission lines, utilities and grid operators can use sensors, software, advanced controls and real-time data to better understand—and potentially increase—the amount of electricity existing infrastructure can safely carry.

THREE TECHNOLOGIES TO KNOW

DYNAMIC LINE RATING

Traditional transmission lines are often operated using predetermined capacity limits. Dynamic line rating uses real-time conditions—including temperature, wind and equipment data—to determine how much electricity a line can safely carry at a particular moment.



TOPOLOGY OPTIMIZATION

Software can analyze the configuration of an electrical network and identify alternative ways to route electricity around congestion, helping operators make better use of existing infrastructure.



ADVANCED POWER-FLOW CONTROL

Specialized equipment can redirect electricity away from congested transmission lines and toward portions of the network with available capacity.



WHY IT MATTERS

The International Energy Agency estimates that dynamic ratings, topology optimization and advanced power-flow control could enable up to

330 GW

of additional generation, storage and electricity demand to connect to existing networks without conventional grid reinforcement.

The IEA estimates that connecting the same amount through traditional network expansion would require approximately

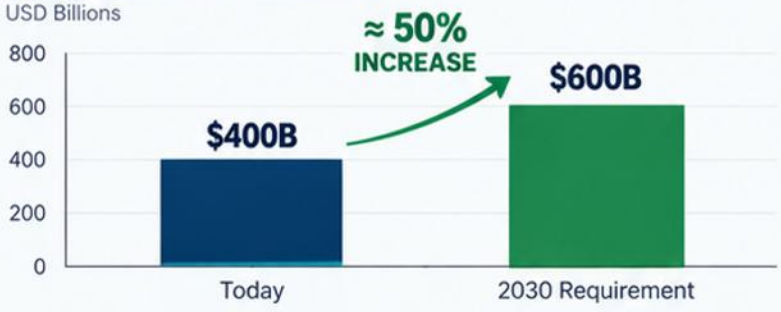
$100 BILLION

of investment.

The larger investment story may therefore involve both sides of the equation: **Building more infrastructure—and making existing infrastructure more productive.**

THE GRID INVESTMENT GAP

Annual global grid investment



WHY THIS CHART MATTERS

The IEA estimates that meeting forecast electricity demand through 2030 will require annual global grid investment to rise approximately **50%** from today's roughly $400 billion level.

More than **2,500 GW** of renewable generation, storage and large-load projects are already stalled in grid-connection queues worldwide.

That makes grid infrastructure more than an energy issue.

It is increasingly becoming an investment bottleneck—and an investment opportunity.

WHAT WE'RE WATCHING



The developments that could shape environmental investment in the weeks ahead.



FROM CLIMATE COMMITMENTS TO INVESTABLE PROJECTS

The global policy conversation is increasingly shifting from setting targets toward figuring out how those targets translate into infrastructure, projects and capital deployment.

That transition will be an important theme heading toward **COP31 in Antalya, Türkiye, November 9–20.**

For investors, the question is becoming increasingly practical: Which commitments ultimately create financeable projects, infrastructure requirements and private-market opportunities?

The official Pre-COP31 ministerial meeting and Leaders' event will take place **October 5–8,** providing an early indication of the issues likely to receive attention in Antalya.



CLIMATE FINANCE MOVES TOWARD PRACTICAL SOLUTIONS

Finance itself will remain part of that discussion.

The UNFCCC's **Xingu Finance Talks** are scheduled for **October 11 and 13** in **Bangkok**, with discussions focused on practical solutions surrounding climate-finance implementation and the alignment of financial flows with the Paris Agreement.

WHAT WE'RE WATCHING: whether the conversation increasingly moves from how much capital is needed toward how **projects** can **actually** become investable.



SUSTAINABILITY DATA BECOMES INVESTMENT INFRASTRUCTURE

As environmental investing grows, so does the need to measure what investors actually own and finance.

Environmental Finance's **Sustainability Data EMEA 2026** is scheduled for **October 7** in London, highlighting the growing role of sustainability data in investment markets.

Better environmental data may become increasingly important for due diligence, risk assessment, impact measurement and capital allocation.



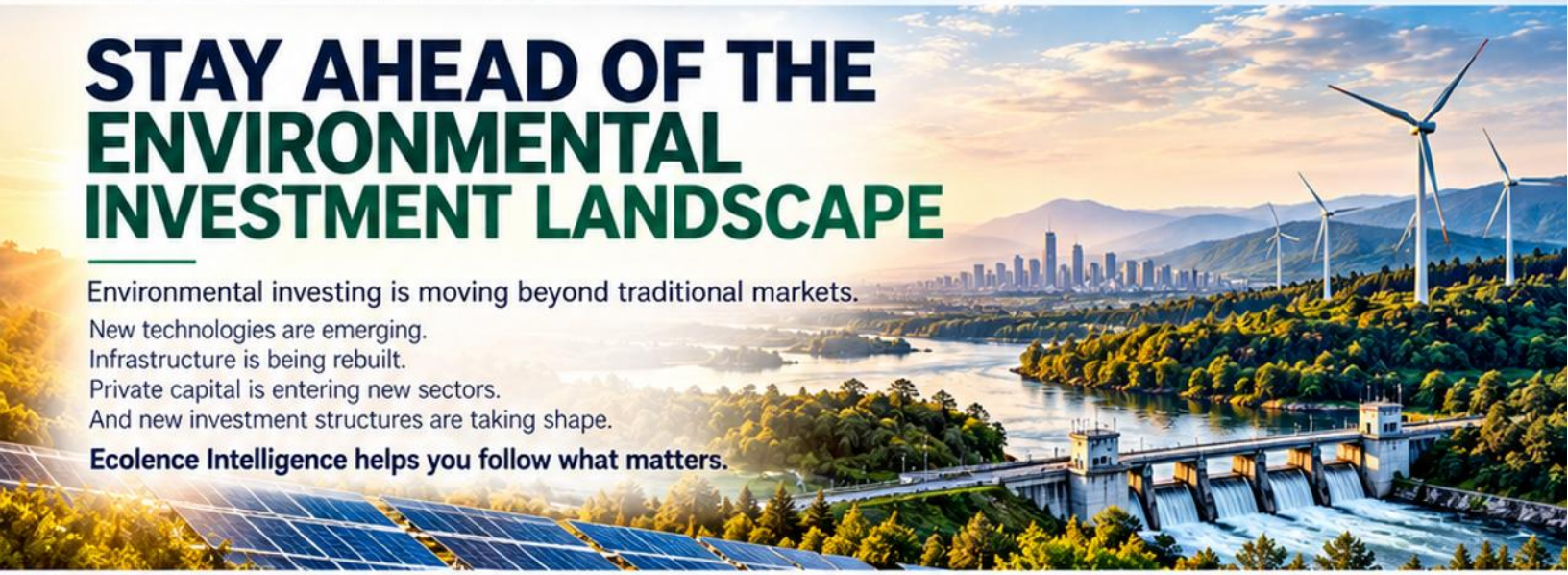
NATURAL CAPITAL CONTINUES TO MATURE

The recent first close of **Mombak's** second Amazon reforestation fund is another development worth following.

The fund is targeting **$150 million**, has access to an approximately **$39 million** credit line, and is paired with corporate demand for carbon-removal credits.

WHAT WE'RE WATCHING: whether natural-capital strategies increasingly combine institutional fund structures, debt financing and contracted environmental revenues.

STAY AHEAD OF THE ENVIRONMENTAL INVESTMENT LANDSCAPE



Environmental investing is moving beyond traditional markets.

New technologies are emerging.
Infrastructure is being rebuilt.
Private capital is entering new sectors.
And new investment structures are taking shape.

Ecolence Intelligence helps you follow what matters.

ONE BRIEFING. EVERY WEEK.

Each issue brings together the developments shaping environmental and impact investing:



THE BIG PICTURE

The story behind an important investment trend.



5 THINGS TO KNOW

The week's developments—and why they matter.



CAPITAL FLOWS + SECTOR WATCH

Where money is moving across the environmental economy.



TECHNOLOGY WATCH + ONE CHART

Innovation and data shaping the investment landscape.



WHAT WE'RE WATCHING

The developments that could matter next.

SUBSCRIBE TO ECOLENCE INTELLIGENCE

Delivered every Friday.

Stay informed about the capital, companies, projects and ideas shaping the environmental investment marketplace.

SUBSCRIBE FREE →

Scan the QR code or visit Ecolence to join the Intelligence list.

NEXT ISSUE

ISSUE 002 — OCTOBER 2, 2026

What will we be watching next?

The next issue of Ecolence Intelligence continues our coverage of capital flows, emerging technologies, environmental infrastructure and private-market investment trends.

FROM ECOLENCE

COMING SOON

THE 2027 ENVIRONMENTAL INVESTMENT OUTLOOK

Where could environmental investment opportunities emerge next?

Ecolence is developing its **2027 Environmental Investment Outlook**, examining the sectors, technologies, real assets and investment structures we believe investors should understand as the environmental economy continues to evolve.

The report will explore:

- Energy & Infrastructure
- Sustainable Agriculture
- Water
- Natural Capital
- Circular Economy
- Environmental Technology

Our objective is not to predict which investment will win.

It is to help investors better understand **where the environmental investment landscape is heading—and the forces shaping it.**