

# Brunswick SOCIAL VALUE Review

The Role of Business in Society

No. 4 | 2023

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## Nature





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**W**ELCOME TO THIS EDITION OF THE *Brunswick Social Value Review*, which aims to chronicle the growing pressure on companies to demonstrate that they are part of the solution to the world's great challenges, and to show what leadership looks like in this space.

We launched the *Social Value Review* in 2020 with a special focus on the Climate Crisis, and in this issue we turn to a parallel environmental challenge—the Biodiversity Crisis, which is growing in intensity and urgency. *Nature*, then, is the focus of this edition.

As ever, we begin by looking at the data. It's an arresting picture: All the key indications on biodiversity are flashing red. We see how scientists are warning of an approaching mass extinction—an eighth of all known species are expected to be lost—and the prospect of widespread ecosystem collapse.

It's become increasingly clear that biodiversity loss is not only an environmental issue—it's also a critical business issue. A major global company CEO once told us that habitat destruction was sometimes necessary for progress: "I'm pro-human, not pro-toad," he said. Today, most people would see this as a false choice. The World Economic Forum calculates that more than half of our global GDP depends directly on nature. This may even be a conservative estimate because a rapid biodiversity collapse would have the knock-on effects of undermining global food systems, disrupting supply chains, impacting health and threatening financial and political stability.





On the Climate Crisis, net zero emerged as a path to action for the global economy. The world now needs an equivalent response on biodiversity, and many are rallying around the concept of nature positive. As we shall see in this edition, the opportunity for business is to be part of catalyzing change.

It took decades to secure the consensus we have on climate—and we don't have decades to do the same on biodiversity. But there is some reason for hope. Businesses are coming to the table—many were part of the Biodiversity COP in 2022. More importantly, leading businesses are moving to action—and in the pages that follow we'll see what this looks like.

Regenerative agriculture is the new frontier for food companies—and we'll meet the leaders of systemically important companies, such as the CEO of Nestlé, who have set out significant transformation agendas for their businesses. Deforestation for cattle grazing has been a major cause of biodiversity loss, and McDonald's Chief Sustainability Officer describes the company's ambition for a deforestation-free supply chain—and PepsiCo's CSO brings alive what it means to shift decisively toward regenerative practices in the fields.

We're delighted that the voices in this *Review* reflect this multi-dimensional issue—from the oceans to the forests to the fields. Christiana Figueres, recognized internationally for her leadership role in the UN's climate agenda, highlights the interdependence of the climate and biodiversity issues. We hear global perspectives, from Ilona Szabó de Carvalho,

founder of the Igarapé Institute, a nonprofit on the frontline at the heart of the Amazon Basin, to Tanzania's Elizabeth Maruma Mrema who has recently taken up her role as Deputy Executive Director for the UN's Environment Programme, to Swetha Stotra Bhashyam, a young voice rising in India to become the Focal Point for the South in the Global Youth Biodiversity Network. With insights on the potential of satellite technology from Kayrros to the potential for natural capital solutions from Schroders and the emergence of science-based targets for nature, we explore the issue in the round.

This edition of the *Brunswick Social Value Review* coincides with the publication of our new book, *The Activist Leader: A New Mindset for Doing Business*—and we close with a preview of this. The book's proposition is simple: To be a successful business leader in today's world you are expected to deliver societal value alongside financial value. Not one at the expense of the other.

And doing that takes a new mindset: the ability to think like an activist about the role your business plays in the world. To focus on what matters and contribute to the change that needs to happen, to mobilize resources, to ask disruptive questions, to transform systems. Nowhere is this needed more than on the challenge of biodiversity—it is, certainly, one of the great calls for leadership of our time. ♦

**LUCY PARKER & JON MILLER** are Partners based in London leading the firm's Social Value offer.

# FOREWORD

“Biodiversity loss isn't only an environmental issue—it's also a critical business issue.”



# BIODIVERSITY CRISIS

**G**RADUALLY, THEN SUDDENLY—THAT WAS Ernest Hemingway's famous description of going bankrupt.

Distressingly, our life support system—nature—is on track to follow a similar pattern of collapse. Our oceans and forests; the manifold animals, plants and the complex ecosystems they create: All are approaching breaking point.

If this seems like hyperbole, it's not. As the following pages show, every indicator of the natural world is flashing code red. At stake are the foundations of economies, livelihoods, food security and health.

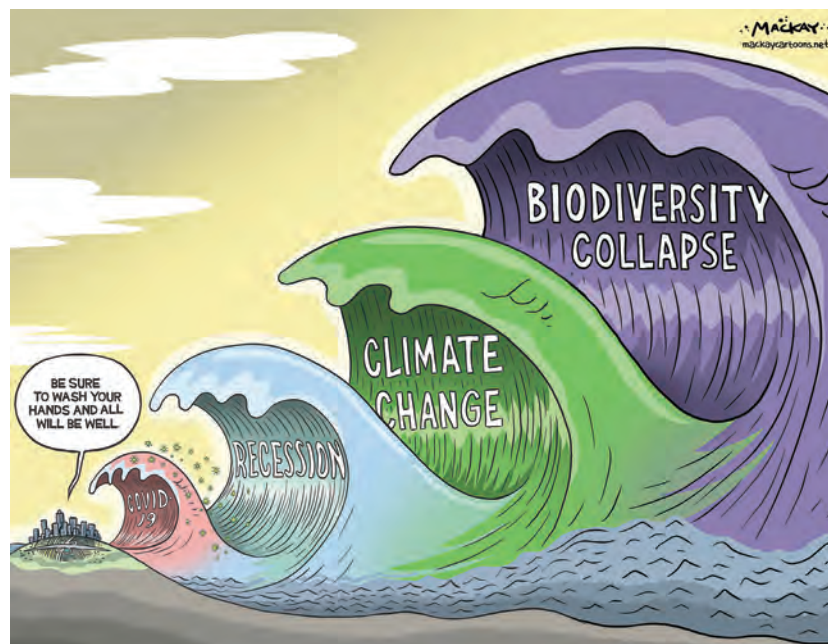
After a devastating pandemic, the economic headwinds and geopolitical tensions are severe. Energy and food costs continue to rise globally, spurring a vicious cycle: stagflation. So today, many people are more worried about the end of the month than the end of the world.

Yet an editorial cartoon (shown below) that was shared widely online in 2020 captures the challenge vividly: Acute crises don't magic away chronic ones.

The good news? Gradually, then suddenly—that is how major system transformations happen, too.

A decade ago, no country had set a net-zero target. Today, more than 130 countries representing 91% of global GDP have one. Over 550 major financial

While climate is a well-established concern, **MASS EXTINCTION** and **ECOSYSTEM COLLAPSE** loom equally large—and businesses are beginning to respond.



institutions, with \$130 trillion of assets under management, are now committed to transition their portfolios to net zero.

And just as a tipping point for climate action has been established in recent years, now we are approaching one for nature. A new consensus is emerging that our global economy must not just become net zero but also nature positive.

At the close of 2022 in Montreal, Canada, more than 190 countries came together for the UN Biodiversity Conference to forge a new global deal to reverse nature loss. With an ambitious pledge to conserve 30% of the world's land and oceans by 2030, the agreement was considered by many to be transformational, in a way that echoes the global commitment to the Paris Agreement on climate.

Beyond the conference hall, awareness of the biodiversity crisis is growing and pressure is mounting—from regulators, investors and customers—for





## THE DATA

# The 6th Mass Extinction

**S**cientists have warned that the biodiversity crisis is now so severe that we are witnessing Earth's sixth mass extinction event.

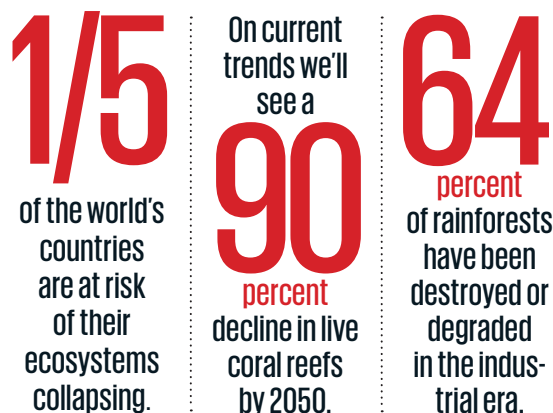
Biodiversity is the number and variety of living things on earth, and how they interconnect to create balanced natural environments that provide us all with oxygen, water, food and countless other benefits.

It is natural that species die off over time and nature slowly replaces what has been lost. What is different about a mass extinction event is that 75% of all species die out in a short period of geological time. The last one marked the end of the dinosaurs.

The United Nations says of the estimated 8 million plant and animal species on Earth up to 1 million species are now at risk of extinction—many of them within decades.

## ECOSYSTEM COLLAPSE

Even major ecosystems—wetlands, rainforests, coral reefs—are collapsing. In these areas, plants, animals and other organisms interact with geography and each other in a delicate balance of life. Like dominoes, the rapid decline of some species can precipitate the decline of others and the downfall of an entire ecosystem.



SOURCES: Swiss Re, UN Environment Programme, Rainforest Foundation Norway

business to become part of the solution.

The spotlight is on four key industries: food, energy, infrastructure and fashion. Together they currently drive 90% of biodiversity loss. Many business leaders are realizing that the thriving companies of tomorrow will be those who move now and innovate to protect and restore the natural systems that underpin their long-term resilience and our existence.

Nature is the focus of the fourth *Brunswick Social Value Review*, in which we explore the topic through a range of voices, geographies and sectors. We hear from companies in the vanguard as well as experts who have been studying these issues for decades.

Yet “nature” and “biodiversity” are such broad terms and topics that it can be helpful to set some context. What is the biodiversity crisis, exactly, and why does it matter? What's it got to do with businesses, and how can they respond? We highlight some of the key datapoints in the following pages.

**A deforested and burned area stretches along the Trans-Amazonian Highway in Brazil. Forest fires in the region are more frequent as temperatures rise.**



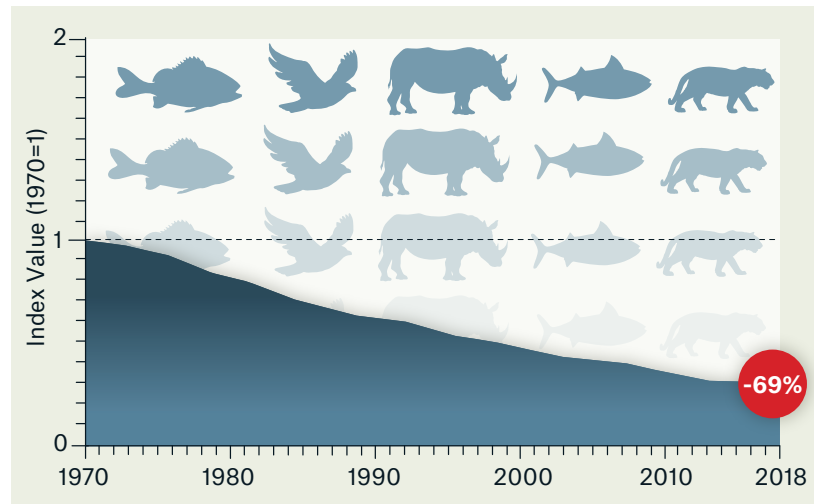
# SPECIES Decline

## ANIMALS

Even animals that aren't at immediate risk of extinction are nonetheless depleting fast, causing the threat of ecosystem collapse:

- The World Wildlife Fund's "Living Planet Report" showed that wildlife populations—mammals, birds and fish—have declined by almost 70% since 1970.

Plants, animals and insects form the natural foundations of all human activity—**AND THEY ARE IN PERIL.**



SOURCE: WWF/Zoological Society of London



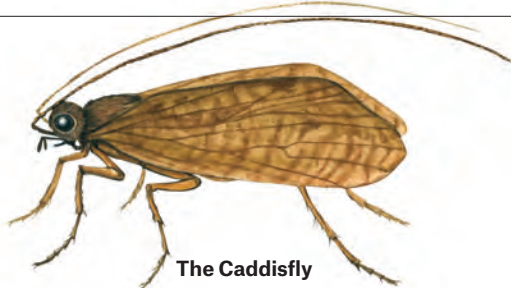
The Cycad

## PLANTS

While public attention and outcry usually focus on animal extinction, plant species are a fundamental part of the ecosystem picture and are also threatened:

- Plant extinction is happening 500 times faster than it would without human activity, according to a study in *Nature Ecology & Evolution*.
- Today, scientists estimate over 40% of the world's roughly 320,000 plant species are at risk of extinction, many within decades.

## INSECTS

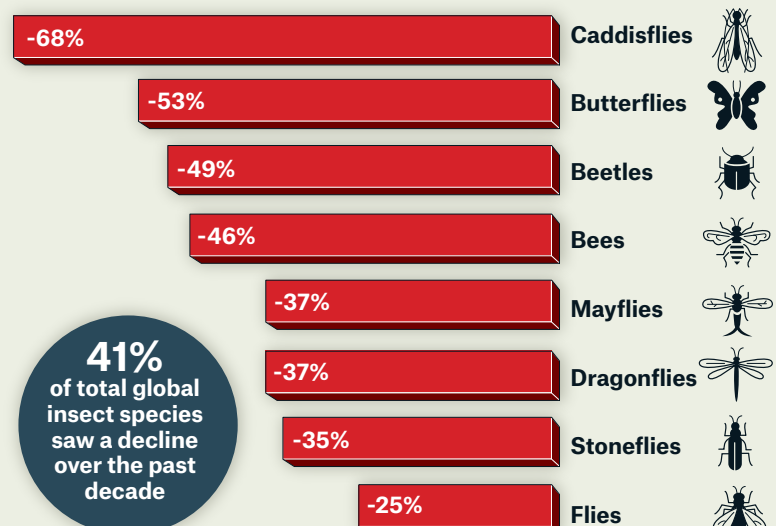


The Caddisfly

Insects are by far the most varied and abundant animals and are essential to the functioning of life on earth, yet, according a recent study published in the journal *Biological Conservation*:

- More than 40% of insect species are declining and a third are endangered.
- The world's insect population is falling by 2.5% a year. If this rate continues: In 10 years 25% will be gone, in 50 years 50% will be gone and in a century all could have vanished entirely.

### Percentage decline in selected global insect populations over the past decade



SOURCE: Sánchez-Bayo, Wyckhuys, Biological Conservation



## THE VALUE AT STAKE

It's not just that we'll lose precious animal species, corals and rainforests. Nature loss is a system risk that threatens the foundations of human life: our food, our climate, our health and our economies.

### Food Security

- The World Bank finds more than 75% of crops rely on pollinators, many of which are disappearing.
- Over 3 billion people depend on marine and coastal biodiversity for both their meals and livelihoods, yet fish stocks are dangerously overfished.

### Economic Resilience

- Moody's sees biodiversity loss as the "next frontier" in risk management. Studies from the University of Cambridge show the loss of nature could severely cut more than half of the world's sovereign credit ratings and even threaten bankruptcies.

The value biodiversity creates is estimated at  
**150**  
trillion dollars annually.

A nature-positive economy by 2030 could unlock 10 trillion dollars in value and  
**395**  
million jobs.

More than  
**1/2**  
of the global GDP—44 trillion dollars—depends on nature.

SOURCE: World Economic Forum, Boston Consulting Group

**The message is clear:** Our economy and livelihoods can only be as resilient as the system they're part of. Indeed, Dr. Simon Zadek at Nature Finance argues that such calculations are essentially a distraction. "100% of the economy is 100% dependent on nature—the risk is existential," he says.

### Climate Change

Our land and oceans are invaluable carbon sinks—currently absorbing half of man-made carbon emissions. But by destroying nature, this capacity is being steadily eroded, leading to a vicious cycle:

- Deforestation alone accounts for around 11% of our annual emissions according to the influential Intergovernmental Panel on Climate Change.
- Analysis found that bottom trawling, a widespread fishing practice, releases as much CO<sub>2</sub> as aviation.
- Shockingly, the Brazilian Amazon now emits more carbon than it absorbs as rapid deforestation outweighs carbon capture by remaining trees.



Dense smog shrouds the Bandra-Worli Sea Link in Mumbai. World Health Organization data indicates that 99% of the global population breathes unhealthy air.

## WHAT'S DRIVING THE CRISIS?

The landmark 2019 report from the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) highlights five core drivers of the nature crisis.

### 1. Changes in land and sea use

- Research from the University of Cambridge shows deforestation and land conversion for farming and human settlements have destroyed a fifth of wildlife habitats since 1700, with a big acceleration since 1960.

### 2. Direct overexploitation of species

- Practices such as the illegal wildlife trade and overfishing are key drivers of biodiversity collapse.
- The Food and Agriculture Organization (FAO) estimates almost 90% of fish stocks are overfished or depleted.

### 3. Climate change

- Shifts in temperature, rain and wind flows caused by climate change are key drivers of species decline, creating a dangerous feedback loop.

- These extreme pressures on biodiversity are becoming clearer each day: rising ocean acidification and desertification, melting ice landscapes and catastrophic events such as floods, wildfires or droughts.

### 4. Pollution of soil, water and air

- One third of the Earth's soils are degraded according to the FAO.
- Plastic could outweigh fish in the world's oceans by 2050.
- World Health Organization data shows that 99% of the global population breathes unhealthy air that exceeds WHO air quality limits.

### 5. Spread of invasive species

- The National Wildlife Foundation found that 42% of endangered or threatened species are put under pressure by invasive species. And human activities, often inadvertently, are the main cause—for example, releasing pets into the wild or expelling ballast water from cargo ships.



# BUSINESS on the FRONTLINE

The challenge is to reverse course, from causing nature loss to being “NATURE POSITIVE.” By STACEY CHOW.

**T**HE NATURE CRISIS IS A BUSINESS crisis. Boston Consulting Group calculates that 90% of man-made pressure on biodiversity is driven by four key industries: food, energy, infrastructure and fashion. These industries are completely critical to human life, providing us with the essentials: food, fuel, homes and clothes. But the way businesses in those industries are currently operating just isn't sustainable and time is running out to course correct.

That's why the spotlight is intensifying on them—and indeed, all businesses.

Nature loss has become a much more high-profile issue. Brunswick analysis shows mentions of nature loss have tripled since 2020 in English language news and business sources, with more mentions in 2022 than from 2006 to 2020 combined.

## BUSINESS CRITICAL STAKEHOLDERS are calling on COMPANIES to ACT NOW

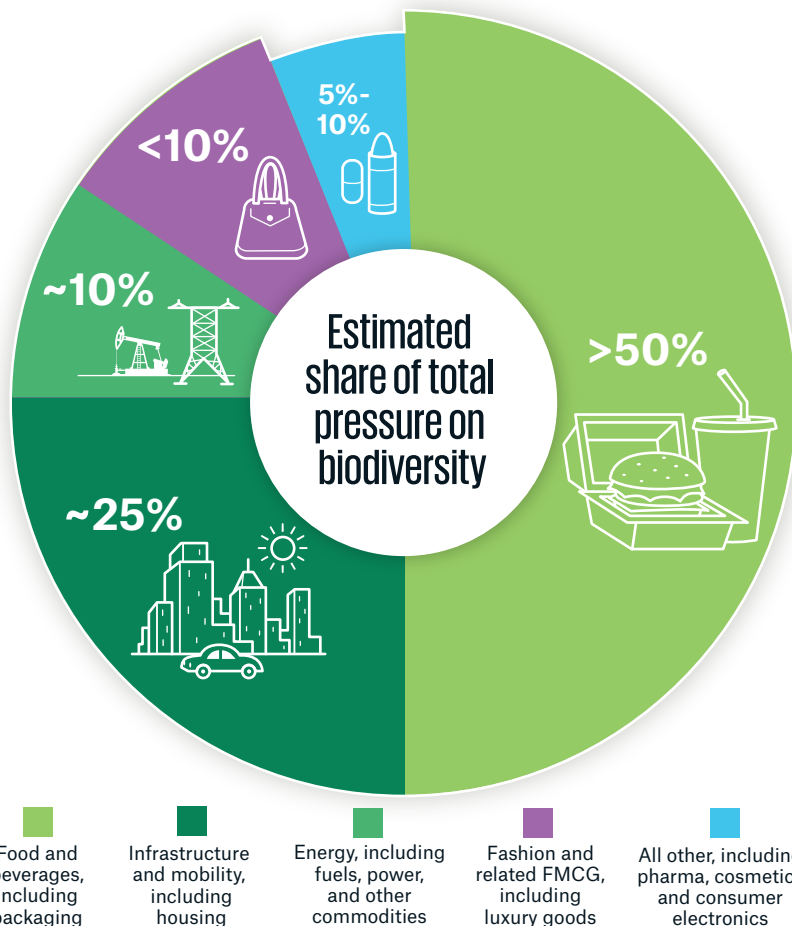
**1 INVESTORS:** Leading investors have announced the launch of Nature Action 100, designed as an equivalent to the landmark Climate Action 100+ initiative which made a significant impact on corporate climate action. This will accelerate investor focus on nature risk while driving alignment around shared asks and expectations.

**2 POLICYMAKERS:** The new Global Biodiversity Framework signed in Montreal by 196 parties requires all large and transnational businesses to assess and disclose their impacts and dependencies on nature by 2030 at the very latest.

**3 CONSUMERS:** More than nine in 10 people in the EU see biodiversity loss as a “serious” or “very serious” issue.

## KEY INDUSTRIES IN THE SPOTLIGHT

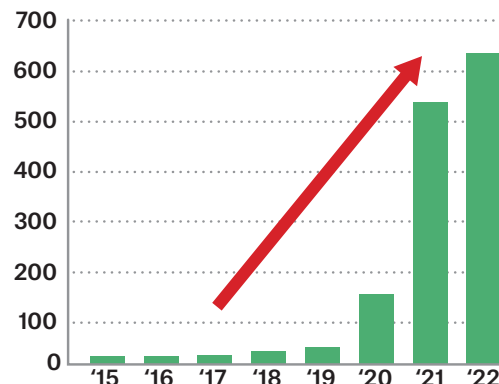
Four major value chains account for about 90% of pressure on biodiversity.



SOURCE: Boston Consulting Group

## NATURE IN THE NEWS

Mentions of “nature positive” or “nature loss” in major English-language news and business sources have skyrocketed in the last five years, Brunswick research has found.



GRAPHICS: PETER HOEY

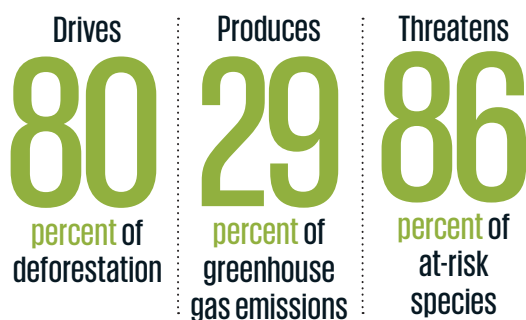




An illegal dredger used to extract gold dust in the Amazon rainforest of southeastern Peru. The challenge for business is to not merely stop damaging nature, but to actively help restore it.

## SPOTLIGHT ON THE FOOD SYSTEM

Our global food system, as it currently operates, is the primary driver of biodiversity loss. The numbers show that it:



SOURCE: United Nations

**TRANSFORMING** our approach to farming could deliver 80% of the emissions mitigation needed by 2030, while also delivering more and better food.

## RISING BUSINESS ENGAGEMENT

Many companies have seen that acting on nature is a chance to seize new opportunities, winning trust with customers and civil society, while mitigating significant exposure to risk.

- In the run up to the Biodiversity COP in 2022, more than 330 businesses joined a campaign to get governments to make nature assessment and disclosure mandatory.
- The International Sustainability Standards Board (ISSB) announced it will incorporate nature in its disclosure standards when they are released later this year.

## The New Concept of "NATURE POSITIVE"

A new stakeholder consensus is emerging that our global economy must become not just "net zero" but also "nature positive."

Led by global environmental NGOs, such as WWF and The Nature Conservancy, along with the World Business Council for Sustainable Development, supporters of "nature positive" intend it as a simple but engaging goal, to serve as a focal point for big ambition. The aim is to reverse the current declines in biodiversity by 2030, so that nature can begin to replenish and fully recover by 2050. That means urgently halting harmful practices, while at the same time actively restoring nature.

Critics of the term "nature positive" want to see more specifics, particularly of how it is measured. Yet it is already becoming a motivating North Star for many businesses, investors and society.

The World Economic Forum has mapped out tangible steps for businesses to play their part in reaching this goal (see page 12). ♦

**STACEY CHOW** is a Brunswick Partner and the Business & Society Asia-Pacific Lead based in Hong Kong.



# The BUSINESS PATH to NATURE POSITIVE

**H**UMANS AREN'T ADEPT AT GRASPING REALLY big numbers. Yet those are what we invariably use to convey both how important nature is and how devastating our collective inaction remains.

To help connect those massive numbers to tangible steps, the World Economic Forum created a series called the New Nature Economy Reports (NNER). These reports view the situation through the lenses most familiar to business: risks and opportunities. Blending research and analysis, the New Nature Economy series lays out why nature-related risks matter to business, what transitions are required to reach a nature-positive future, and the opportunities to be gained from doing so.

## SECTOR TRANSITION PATHWAYS

The NNER series highlights how three key systems with highest impact also have the most to gain by transforming:

1. Food, land and ocean use
2. Infrastructure and the built environment
3. Extractives and energy

Collectively, these systems represent more than one-third of the global economy and two-thirds of all jobs, and they endanger around 80% of

The New Nature Economy series, produced by the **WORLD ECONOMIC FORUM**, lays out the risks and opportunities for business. By **AKANKSHA KHATRI** and **LUCY ALMOND**.

threatened or near-threatened species. Improvements in these systems will produce outsized impact.

## REGIONAL DEEP-DIVE

Taking the global framework into regional and country deep-dives has been helpful in showing that as sectors transform, so must entire regions. In China, for example, a recent WEF report—produced in collaboration with Golden Bee—finds that there are 15 priority transitions that have the potential to add \$1.9 trillion in annual business value and create 88 million jobs by 2030. It is a similar story for other regions: There are significant economic and societal gains to be realized.

## NET ZERO AND NATURE POSITIVE

Companies are increasingly recognizing that nature-related risks are just as critical as—and interwoven with—climate-related risks. And, as with climate, managing risk is only half the story; unlocking opportunity is the other half. For instance, we calculate the benefits of protecting at least 30% of the world's land and oceans outweigh the costs by a ratio of at least five to one. There are growing opportunities and proven business models for nature-positive aligned investment. Already companies are using nature-based solutions to do everything from shore



up their bottom line to increase the resilience of their supply chains.

### GUIDANCE ON HOW TO GET GOING

As action mounts, a deep pool of guidance and expertise is emerging on how to implement both net-zero and nature-positive transitions. The level of detail is important but sometimes the volume of guidance can feel overwhelming for companies, and at times even be conflicting. That's why it's critically important that a range of groups such as Business for Nature, Science Based Targets Network (SBTN), and the World Business Council for Sustainable Development have come together to create a joint, easy-to-understand framework which presents the high-level steps a business needs to take. It's called ACT-D, or Assess, Commit, Transform, Disclose.

**ASSESS:** Every business's first step should be to assess double materiality of impact and dependency on nature.

**COMMIT:** Follow up by setting targets. The SBTN provides guidance for companies to set science-based targets for both nature and climate.

**TRANSFORM:** For companies looking to invest in high-integrity nature-based solutions, particularly beyond their own value chains, a wealth of new resources are emerging, such as the Natural Climate Solutions Alliance corporate guide, and the recently published Tropical Forest Credit Integrity guide.

**DISCLOSE:** The Taskforce on Nature-related Financial Disclosures, for example, provides a framework for how organizations can assess and disclose their impacts, while channeling capital and taking action to address environmental risks and opportunities.

### WHAT DOES LEADERSHIP LOOK LIKE?

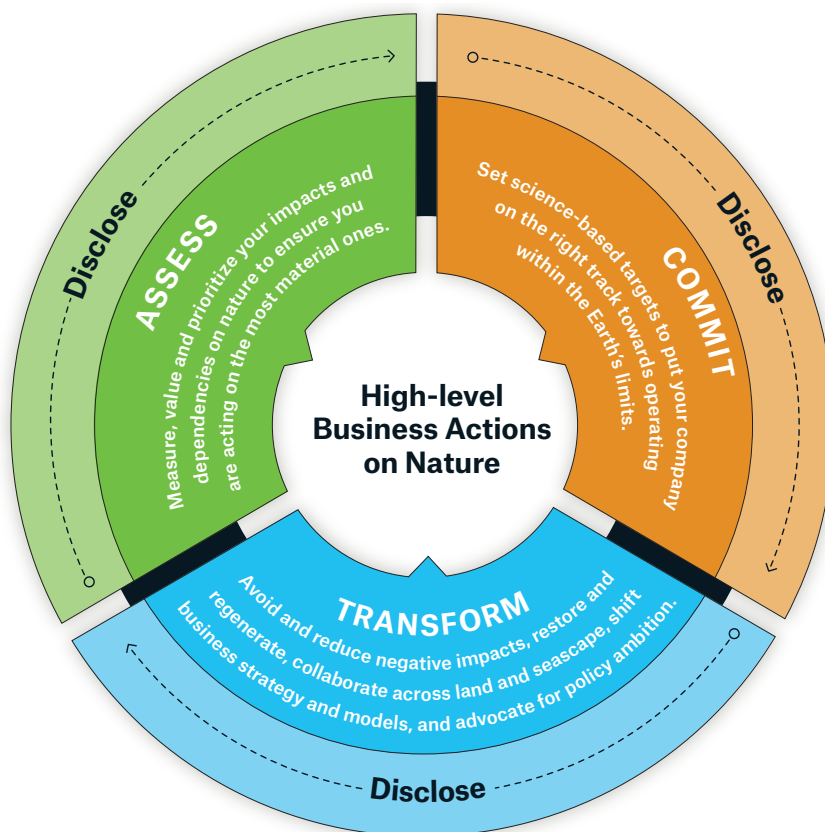
Leading companies are putting that guidance into practice. The details will differ slightly for each industry and company, but businesses on the forefront of this issue are all taking two related steps:

**1. They're decarbonizing fast and transparently.** They play their role in moving the world toward net zero and a pathway that is 1.5°C compatible.

**2. They recognize there is no net zero without nature.** That means harnessing the power of nature in their climate strategy and investing in core business transformations. The overarching goal is to move toward a nature-positive future, which requires halting and reversing nature loss associated with business activities, such as deforestation, habitat conversion or overfishing.

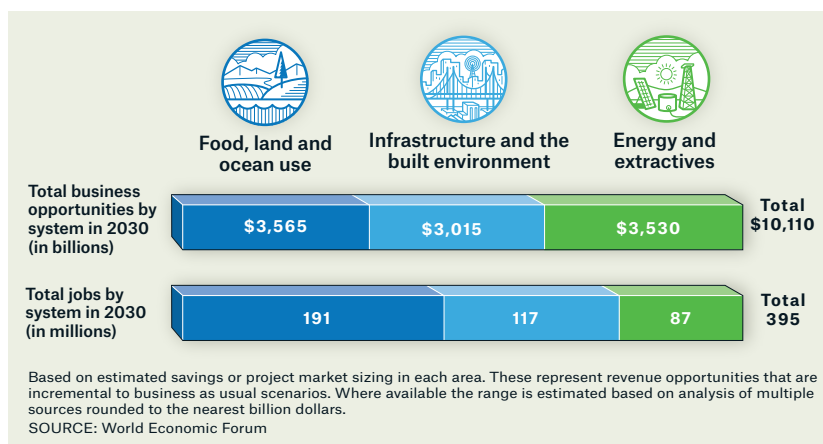
## STEPS TO NATURE POSITIVE

The World Economic Forum's ACT-D model provides a framework for business action.



## 3 KEY SYSTEMS

**15 transitions** in three socio-economic systems could deliver **\$10.1 trillion** of annual business opportunities and **395 million jobs** by 2030.



Big steps, like big numbers, can risk sparking inaction—where does one begin? Fortunately, a growing body of research and guidance helps answer that question, demonstrating how businesses can carve out ambitious paths to net zero *and* nature positive. ♦

**AKANKSHA KHATRI** is Head of Nature Action Agenda for World Economic Forum's Platform for Global Public Goods. **LUCY ALMOND** is Chair of the Nature4Climate coalition.



# No NET ZERO without NATURE

**F**OR BUSINESSES SEEKING TO DELIVER ON THEIR net-zero commitments, action on nature is not an option. It's a necessity, especially for those with land-based value chains.

That is the clear message from two leading lights of the climate agenda in a pair of engaging interviews below.

First, we hear from **Christiana Figueres**, former Executive Secretary of the UN Framework Convention on Climate Change. After assuming responsibility for the international climate change negotiations months after the failed Copenhagen conference of 2009, she played a critical role in orchestrating the landmark Paris Agreement of 2015. Key to success was Figueres' skill in bringing governments, business and civil society together behind an ambitious shared goal. As a renowned global leader, diplomat and author on climate change, she knows as much as anyone about where the world needs to go, and what it will take to get there. Below, she describes the "inextricable" link between climate and nature as "two sides of a very, very thin piece of paper."

Our second expert perspective (page 17) comes from **María Mendiluce**, CEO of the influential We Mean Business Coalition, which works with many of the world's largest companies to drive and support business action on climate change. Mendiluce has 25 years of experience working in business and with international organizations and governments on sustainable development, energy and climate action. She is also a professor and published scholar with a PhD in energy economics. In this interview, Mendiluce tells us that companies need to start investing in nature-based solutions now if they are to have any hope of hitting their climate targets.

Preserving and restoring nature is a critical part of the climate solution. Brunswick asks **TWO LEADERS** of this effort to draw on their experience and highlight the role of business.

## CHRISTIANA FIGUERES

*Speaking with Brunswick's Phil Drew, Figueres draws on her experience crafting the Paris climate accords and outlines the new type of leadership that will be needed from business and policymakers alike if we are to reach net zero. She sees this as a perilous moment, but emphasizes the importance of a mindset that lends itself to action and outcomes over doom and half-hearted measures.*

### Why is restoring nature so fundamental to reaching net zero?

Nature and climate are actually two sides of the same very thin piece of paper. You need nature to help absorb CO<sub>2</sub>, putting the carbon into trees, into roots, into soil, into everything that is the biomass and releasing the oxygen. If nature is not there, our CO<sub>2</sub> concentration will just continue to go up. Nature is some 30% of the solution to climate.

From the other perspective, if we don't have a stable climate, we will not be able to preserve our biodiversity. So stable climate is critical to the preservation of biodiversity. As I say, two sides of a very, very thin piece of paper. You can cut it along its other two dimensions, but you can't separate the two sides.

It is only humans that want to see them as separate. Nature laughs at us, "whoever told you that those two things are two systems that sit side by side? They are inextricably intertwined."

They actually constitute a self-enclosed feedback loop. Nature's capacity to be resilient depends on the health and the vigor of that loop. And it is nature's capacity to be resilient that allows human beings to be resilient.





**You've described this as the most perilous moment in human history. Why is that?**

Because we're in the Anthropocene Epoch now. Prior to the 1950s, it was actually nature itself that was determining the evolution of the planet and she was a self-regulating system. And then, 70 years ago, in the 1950s, we took over that role. The pen of history moved from nature, where she had been for 4.5 billion years, to humans.

It is the most important moment in the evolution of the planet, but also in the evolution of human presence on this planet. By 2030 we will largely have decided the next hundred or so years—whether it will be years of constant destruction, or whether we stand a chance of stabilizing the environment, or even creating a regeneration.

Not to trivialize it, but think of TV game shows from the past that have you choose: door number one or door number two? If we choose door number one, business as usual, the same polluting behaviors, the same greenhouse-gas-emitting investments and technologies, we're committed to that future of constant misery and increasing

**Nature and climate “are inextricably intertwined.”**

**Christiana Figueres**

destruction. Whereas if we choose door two, which we have to choose now, because the path has already divided, we will have opened a portal that not only avoids the worst of climate impacts and biodiversity loss, but actually opens the door to the possibility of regenerating the planet.

By 2030, we will have decided which way we go. That's why the moment is perilous.

**Choosing which way to go will be an act of leadership. What does the standard for what credible leadership for business on nature look like?**

Now that we are aware of the consequences of that choice, the role of business has shifted completely. Even just 10 years ago the role of business was maximizing profit, because that's what business does.

Equally important to that is what the social and environmental impact is of any business. The triple bottom line is something that we're not going to get away from anymore.

That is what businesses have to embrace. Not just because it's good for their business, but also because there's much more growing public expectation that



that is the role of business.

Leadership now requires both a responsibility for today, plus a clear vision of the future, where are we going and what the consequences are of two very different versions of the future. We can't just say, "When we get there we'll figure that out." The combination of those two things is what I call stewardship. That is where you find leaders in business or in the public sector, who really understand that we're here to exercise our agency as stewards. That requires innovation, creativity, determination—one of my favorite skill sets for leaders because it's not going to be easy. But just because it's complex doesn't mean that we don't do it.

### **What breakthroughs do we need on nature by 2030 that business could contribute to?**

An amazing report has just come out precisely on this subject, "The Breakthrough Effect," by Systemiq and partners. We are at the point of not only negative tipping points, which scientists are very clear about, but actually at the point of positive tipping points. Those positive tipping points can actually self-nurture each other to become a cascade, reinforcing feedback loops that lead to amazing breakthroughs. And the report finds these "super-leverage points" in quite a few sectors. EVs are one of those, and green ammonia also. But I was very taken with the fact that they point to alternative proteins—non-animal proteins or proteins developed from cells. Policy and investment in alternative proteins could produce a cascade of tipping points that would revolutionize how we manage land, reducing livestock, reducing deforestation and improving human health.

This points to exponential outcomes rather than linear, step by step. If you were diagramming this you would almost project the portfolio solutions on to what I think of as a spiderweb, where everything is connected to everything else. If you pull on one point, then you can bring everything else with it.

### **How important are public/private partnerships to achieving real action on nature and climate?**

I go back to my very primitive visual of a thin piece of paper. How do you separate those two things? If you want to get any transformation, you need both policy from the public sector and action in decisions from the private sector. The third thing would be consumer behavior or citizen action. Even the most radical policy by itself isn't going to create a solution. If it's not implemented, if it doesn't motivate the private sector, if it doesn't change individual behavior, it does absolutely nothing.

**"That requires innovation, creativity, determination—one of my favorite skill sets for leaders because it's not going to be easy."**

If you're in the private sector, you could say this is a responsibility of the public. Or if you're in the public, is it a responsibility of the private? Or, it's all about what people do and what products they buy. That exporting of responsibility doesn't get us anywhere. The capacity to make a change is actually about aligning all of those incentives and opportunities.

### **What would be your advice for a business that is just starting to think about the intersection between climate and nature?**

Go up the value chain of your company to understand where value really comes from. Where does predictability come from? Where does stability come from? And how is that being questioned or menaced and, therefore, "What do I have to do?"

We all depend on nature, and it is a very important component of climate change. If we're all exposed to the infrastructure and destruction that comes with climate change, then we really stand no chance. So, it's about making visible the value chain that links a business proposition with the origin of value.

### **You have commented that "nothing is enough, everything counts," is better than the reverse, "everything counts, nothing is enough." Can you explain what you mean by that?**

Nothing on its own is going to be enough. We need everyone on board, all hands on deck, all sectors, all players. Everything counts. Every effort made by a particular sector or a particular part of society contributes to the direction, the speed and the scale.

The question is, where do we put the emphasis? "Everything counts, but nothing is enough," now we're in the mindset of a lack of agency. As if to say, "We're all making an effort, doing the best that we can, but actually this is not going to be possible." That leads to doomism. It's completely irresponsible. Let's get into discernment before we go to doom. So that wording is fatalistic, abdicating our responsibility.

In the opposite direction, when we say "nothing is enough, everything counts" now you're in an additive mindset: "This is a really, really difficult situation. But each one of us, whether we're an individual, or a head of state, or a CEO, can all contribute to change."

Each of us has to choose our mindset. It is a daily choice, because we are barraged with a lot of very bad news on climate and on everything else. To not get out of bed, and pull the sheets over our heads, and go like, "Oh, I can't face this. I'm not going to get out of bed." That's a choice. But it's not a responsible choice. No matter what comes at us, we just cannot give up. ♦



## MARÍA MENDILUCE

*The CEO of the We Mean Business Coalition recognizes the need for clear standards of nature goals for business. But she emphasizes that companies must start to invest in “nature now, with integrity.” She speaks with Brunswick’s Robin Knight.*

# Taking the FIRST STEPS

### What would you say to companies who feel they can’t tackle both climate and nature?

So let me be clear: There is no pathway to keeping global temperature rise below 1.5°C without nature.

Businesses will be making new and different investments necessary to get on the pathway to 1.5°. Therefore, in the years ahead business will have to invest in nature on a potentially transformational scale. Fortunately, those investments offer a fantastic opportunity to both reduce emissions and deliver a whole host of other positive impacts.

Many companies are just at the start of their journey in understanding the potential of investments in nature. And, just like any other issue, they need to develop expertise. I was impressed that during Davos this year, a lot of the conversation was about this joint action—looking at how to embed nature into company climate strategies.

So increasingly, businesses are realizing that nature and climate crises are integrated. They have shared solutions and you should not be looking at them separately. Because one reinforces the other.

### How are companies integrating nature into climate plans, and are there lessons we can draw from progress so far?

Assessing the impacts and dependencies on nature is the first step. That is a process that many companies have already become familiar with through climate action, including through new tools from the Science Based Targets initiative to set land-related targets. Once companies understand their impact on nature, we strongly recommend they take action to contribute to reducing the emissions from land use. The big impact will come from stopping deforestation and ecosystem degradation, and also, reducing emissions by transitioning to regenerative agriculture. Taking these steps will also prepare companies for upcoming policies and regulations that we can expect following the agreement reached at COP15. This includes



“In the years ahead, business will have to invest in nature on a potentially transformational scale.”

**PHIL DREW**, lead client Partner on climate change, and **ROBIN KNIGHT**, Director, are both members of Brunswick’s Business & Society team in London.

requirements for large companies and financial institutions to perform nature-related disclosure.

Then there is the critical step of actively investing to restore nature, to increase much-needed carbon sinks. The SBTi says that companies need to decarbonize at least 90% of their value chain and then the final 10% could be neutralized with investments in carbon removals.

Sometimes there is this debate around how much companies should be focusing on decarbonizing their operations, and how much they should be focusing on “offsetting,” with activities beyond the value chain. For us the message is that it’s not a question of either or; companies need to do both. The critical thing we’re saying to companies is don’t wait to act on that 10%. Of course, decarbonization must happen now, but at the same time companies should also be investing in nature to offset the final 10% of their residual emissions by contributing to reforestation and restoration before it’s too late.

### What needs to happen next for companies to invest more in nature?

Today many companies are struggling to invest in nature because the rules of the game are not clear. There is a strong appetite there, and everyone knows that “offsetting” has spread very widely as a practice. But companies must be very careful that they are investing in nature with integrity.

What often happens in the climate space is that companies go a bit faster than regulations and standards. Different approaches develop and hence they get criticism and greenwashing claims. While that’s part of the process, there’s no one that’s setting the rules for companies to follow. That’s what we need.

Two initiatives launched recently will help change that, by providing credible rules. The first one is the Voluntary Carbon Markets Integrity Initiative, which is providing guidance on how much they should credibly offset and in a way that is very aligned with the SBTi.

That’s on the demand side, and then on the supply side we have The Integrity Council for the Voluntary Carbon Market, which is looking at the actual quality of the investment products themselves, assessing their mitigation potential and so on.

The names are confusing, but the guidance is strong and continually improving. With these initiatives, companies will be provided with a meaningful way to invest in nature and will therefore avoid greenwashing attacks and can help bring these much needed nature-based solutions to scale while also sending financial flows to developing nations. ♦





**K**AYRROS IS A GLOBAL PLATFORM THAT DRAWS on satellite images to measure everything from deforestation to methane emissions with a level of precision that sounds almost like science-fiction. The platform analyzes data and images from satellites across virtually all sensors available—including radar, hyperspectral and 3D. In addition to emissions, it can follow the progress of natural resources and movements of industrial equipment using a combination of satellite imaging, geolocation and computational analysis.

Antoine Rostand, the company's co-founder and CEO, spoke with Brunswick Partners Alex Burnett and Brian Potskowski of the firm's global Climate Hub about the potential of such technology to usher in a new era of transparency on climate change and nature.

**Kayrros uses data from satellites including the ESA's Sentinel-1, above, which monitors Earth's environment. Below, Antoine Rostand speaks at COP26 in Glasgow in 2021.**



#### **What drew you to energy, climate and satellite-based geo-analytic technology?**

I've been in the energy space since the very start of my career. On my first day at work, I was in Libya and the US under President Reagan started bombing in retaliation for actions suspected on the part of then-leader Muammar Gaddafi. So that was a powerful lesson for me in how energy and geopolitics are interlinked. [Gaddafi was believed to be using his nation's oil revenue to fund international terrorism.] So it seemed clear to me when it came to climate that we needed to challenge the way that politics, money and energy are organized to make real progress.

At Kayrros, I wanted to do something new. We found a way to use satellites, cloud computing and machine learning to provide quality data to decision makers. They've been driving toward the energy transition in the dark; we wanted to provide light.





# Bird's Eye View

**You were recently recognized by the *Financial Times* as one of its “Tech Champions” for 2022. Can you tell us about your technology and how it is being used?**

We use more than 10 constellations of hundreds of individual satellites, including satellites managed by the European Space Agency, NASA and commercial satellites. These provide daily images, which we use for three main purposes. First, we measure CO<sub>2</sub> and methane across the major sources, such as oil and gas, cement, minerals and steelmaking, which account for as much as 60% of emissions. We know where these are coming from and can allocate emissions at an asset level, company level or state. We can also see whether they are increasing or diminishing.

Second, we model physical risk from wildfires, for example, or droughts or floods. We can provide

Satellite-based tracking of CO<sub>2</sub> and methane emissions represent the dawn of a new era for business transparency, says **ANTOINE ROSTAND**, CEO of tracking platform Kayrros.

that information to states, insurers or asset owners to adapt to climate change.

Third, we track the energy mix. We can see how much solar capacity is being built, how much oil is being produced or whether there's been a switch from coal to gas. By using this data and deploying cloud computing, artificial intelligence and machine learning we can, for the first time, measure greenhouse gases, physical risk and physical infrastructure.

**This technology seems to have implications for a number of critical stakeholders, from companies to consumers, governments to investors.**

It will simply mean that the necessary information is available. Governments will be able to use it to make decisions. Investors will be able to use our tools for due diligence to deploy capital and engage with companies based on their provable environmental impacts and risks. Fund managers can better decide allocations to equities or bonds based on verified metrics.

**We have seen a surge of sustainability-linked bonds from financial institutions. Some have come under scrutiny for “greenwashing.” How can your technology build trust in this market?**

We can help investors and consumers see the difference for themselves. For example, if you create a green bond or a sustainability-linked instrument, they will be able to trust this information and apply a true value to climate action—we have the technology to make sure that money that is supposed to be green, actually is.

This should translate into greater confidence for the buyer of the bond and lower borrowing costs for the issuer, ultimately helping make the transition cheaper to finance for everyone.

**We're speaking just after COP27 in Egypt. What's your sense of the progress from COP26 to now?**

For us, the main achievement of COP26 was the global methane pledge, signed by 130 countries to collectively reduce emission by at least 30% by 2030. Methane is a much more powerful greenhouse gas than CO<sub>2</sub> and represents almost half of short-term global warming. So, if we stop methane leaks today, we will have an immediate impact on the global warming happening.

But there has been very little progress. Countries are emitting methane at the same rate as before the pledge and we still see the same number of “super-emitters.” I'm a father of four and seeing us collectively fail to do relatively easy things is frustrating.



### Are there differences between what's being reported and the methane emissions you are measuring?

There are discrepancies. Generally, for both states and companies, we see methane emissions of between three and 10 times those being reported. But this is a complex issue, because the way companies report is driven by regulations based on “emissions factors” and not actual emissions. Satellite information is the only way to actually measure and guarantee that what has been reported is accurate, for companies as well as regulators. So there's clearly an issue of re-baselining. The US is moving in this direction, and we hope that the EU will follow. We want to work with government agencies and academia to make the data public.

The good news is that methane emissions from oil and gas production and industry, as opposed to agriculture, occur at a relatively limited number of sources. We have the technology to fix it, and it's relatively easy to do so, particularly emissions from the fossil fuel industry. Most emitters could reduce their methane emissions by 30% or 40% in less than a year. The global methane pledge could be achieved in one year, rather than six or seven. And we are starting to see some action. The US's Inflation Reduction Act is finally going to put a penalty on methane leaks. This will move the needle when it's implemented. Here, the EU needs to do more.

### We've seen a strong focus on nature and biodiversity, alongside growth of the carbon market and offsets as a means of meeting climate goals. What role could satellite technology play here?

On forestry, we now have the ability to track, in real time, tree by tree. We can see how many have been planted and how fast they are growing—an unprecedented transparency. We can also monitor the carbon offsetting market, which forms the backbone of many net-zero strategies. We can see that some firms are doing a very good job, while others are buying cheap, low-quality offsets that are not producing the benefit they report. And for nature-based solutions, we can use a combination of satellites and blockchain technologies to ensure that there is a public ledger, so there's no double-counting of carbon credits.

### What about greenhouse gas emissions from power generation and industry?

We can now track all power plants in real time, whether in the EU, US, India or China. In the EU and US, emissions are generally quite well known, but in India or China this often isn't the case. We can

“Most emitters could reduce their methane emissions by 30 percent or 40 percent in less than a year.”

**ALEX BURNETT** and **BRIAN POTSKOWSKI** are Partners with Brunswick's global Climate Hub, in the firm's London office. Alex joined the firm from Shell, where he designed and oversaw the implementation of Powering Progress, the company's first codified strategy for being purpose-led. Brian focused on decarbonization strategy and policy for the investment firm Riverstone Holdings, where he served as Vice President.

measure the actual CO<sub>2</sub> of the power being generated. The same is true for large industrial emitters. We will be able to track, measure and then calculate the CO<sub>2</sub> emissions of the products that consumers buy. For example, we can probably get 80% of production emissions for a new car, because we can track emissions from the steel and aluminum production. This is important because sometimes when we feel good about decreasing our emissions, we are simply importing emissions produced in the production of goods and services from countries where there are fewer regulations. For governments, greater transparency in this area presents significant opportunities in terms of pricing and taxing carbon emissions.

### What about governments that want to support jobs, but limit the negative impact on nature?

We can help governments too. Today, we are tracking hundreds of farms in Indonesia and Brazil, where we know exactly whether or not they are fulfilling their commitments linked to REDD+ [a framework inspired by the UN for forests] or green finance. Once we can verify and differentiate between good and less good actors, we can create reliable sources of income for farmers who reduce deforestation. I visited the Ivory Coast recently and I can tell you that people don't deforest for fun; they do it because they need food and income. We are talking with the government there about using our technology to prevent deforestation, but also to identify land that could be used for food or other economic activity.

### We have seen a trend toward transparent non-financial reporting. What is this going to mean for how companies report and communicate?

Transparency is coming. People will know what impact companies are having, and being fully transparent will be a way to differentiate yourself in the market. Today, they report according to existing regulations. They are not intentionally minimizing what they report, but they are using emissions factors to calculate emissions, rather than actually measuring those emissions.

When regulation requires satellite-based measurement, things will really change. It's not law yet, but it's the direction of travel for the EU and the US. Then the narrative will be out of companies' hands. It's going to completely change the way companies think about communicating on the environment. Companies should prepare themselves by seeing what others will see. Leading companies will take this leap of faith and embrace transparency, but it's going to be difficult for companies that wait too long. ♦



# Nature Targets With Teeth

Science-based targets revolutionized business action on climate.

**They're poised to do the same for nature.** Leaders from three businesses in the vanguard of this dizzyingly complex—and critical—work talk about shaping the new standards.

**M**ORE THAN 2,000 COMPANIES HAVE SET climate science-based targets through the Science Based Targets initiative (SBTi) to guide them toward net zero—a rigorous, constantly evolving approach to tackling climate change that the *Financial Times* dubbed as the “gold standard.”

Though a growing chorus of experts say that becoming net zero is impossible without becoming nature positive, not a single company has set science-based targets on nature—because no such targets have existed. The Science Based Targets Network (SBTN) is looking to change that.

It's doing so by collaborating with more than 70 NGOs, business associations and consultancies to define what needs to be done to stay within the Earth's limits while meeting society's growing needs.

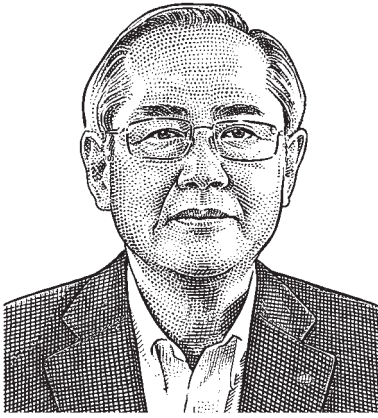
As you might imagine, protecting oceans, land, biodiversity and freshwater involves an enormous range of issues that can be difficult to define or categorize—cattle farming, for instance, can help regenerate soil in one country and contribute to deforestation in another. Where does that fit on a

matrix? For all of climate change's complexity, there is at least a unifying metric—greenhouse gas emissions—that can be measured consistently across the world. The nature crisis offers no such uniformity.

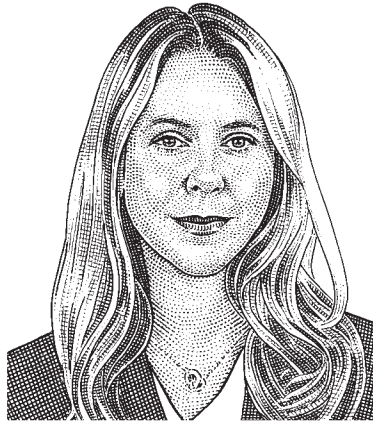
So the challenge for SBTN is twofold: translate the tangle of nature-related issues into frameworks, metrics and tools that actually work—and that businesses can actually understand and implement.

The SBTN's Corporate Engagement Program (CEP) helps on both fronts. Comprised of over 180 companies, consultancies and industry coalitions taking some of the most ambitious action on nature, the CEP brings leading businesses together to share what's worked for them, the challenges they face, and weigh in on tricky questions. It's like having some of the best runners in the world work together on a training plan any committed runner could follow.

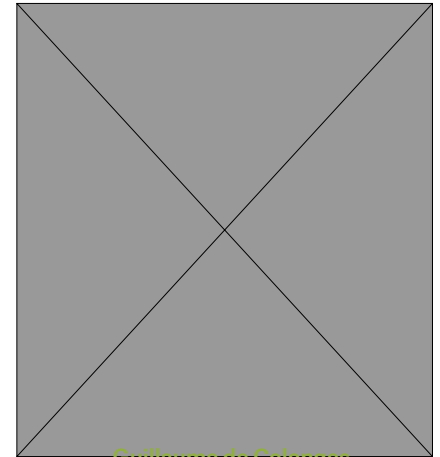
To this task CEP members bring a medley of perspectives and areas of specialization. Kirin Holdings Company Group, a Japanese beverage company, is part of a pilot group on fresh water—after conducting a risk assessment of their biological resources



**Yoshinori Isozaki**  
President and CEO  
Kirin Holdings Group



**Rebecca Marmot**  
Chief Sustainability Officer  
Unilever



**Guillaume de Colonges**  
Merchandise Executive Director  
Carrefour

in 2011, the company has been working to source materials with no environmental impact.

Carrefour, one of the world's largest food retailers, is also working toward ambitious nature goals, including that 50% of the fish sold in its stores should come from sustainable fishing by 2025. Unilever, one of the world's largest consumer goods companies, has set itself the target of a deforestation-free supply chain in palm oil, paper, tea, soy and cocoa by 2023, while investing €1 billion (\$1.07 billion) in a Climate & Nature Fund, which will be disbursed over 10 years.

Brunswick spoke with leaders from those three companies to get a sense of how and why they were working to become nature positive—and why, through their work in CEP, they wanted to help shape the standards by which other companies might do the same.

From each, we heard a similar response: They're acting because nature is central to their business.

"All of Kirin Group's businesses, such as beer and wine, soft drinks and biopharmaceuticals are dependent on the benefits of natural capital," said Yoshinori Isozaki, Kirin's President and CEO.

The centrality of nature was echoed by Rebecca Marmot, Unilever's Chief Sustainability Officer. "The time is now for nature to be integrated into business strategies and for organizations to recognize the value of nature to their business. The science cannot be clearer on the urgency of taking action for nature, but what we need behind these nature goals are internationally recognized frameworks and science-based measurements."

At Carrefour, Guillaume de Colonges, the group's Merchandise Executive Director, cited nature as a "critical issue" for the company "first and foremost because of our customers. They expect us to offer food which limits climate change, which avoids

**"We know  
that in the  
long term,  
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standards."**

**ANUSHAH KHAN**, an Executive, and **CRESSIDA CURTIS**, a Director, are both based in London and part of Brunswick's Business & Society team.

plastic pollution in the ocean, or which protects forests," he said. "And we know that in the long term today's best practices will be tomorrow's standards."

Each leader saw their company's involvement in the CEP as pragmatic rather than altruistic.

"Defining our targets, measuring our progress, and reporting on it internally to our customers or our investors: That is how we can create value," said Carrefour's de Colonges. "These targets can seem theoretical, but they have very practical outcomes in our stores. For example, we provide products from sustainable fishing that are accessible in our seafood and fish section. We are, therefore, visibly transforming the buying experience of our customers."

"Scientific target setting will help make stronger engagement among producers, distributors and consumers," said Kirin's Isozaki. "We apply the knowledge gained here in setting other natural capital targets. Well-designed frameworks and methodologies can help improve a company's own initiatives and make it easier to learn from the best practices of others."

A third thread that ran through each of the conversations was clear: Companies don't have to wait to act, and they don't have to go it alone.

"Despite the definition of nature positive being a work in progress, companies should not be paralyzed or delayed by uncertainty and imperfect information," Unilever's Rebecca Marmot said. "Companies can adopt existing measurement methodologies or reporting frameworks and make a start by conducting a materiality assessment on their impacts and dependencies on nature."

It was a sentiment shared by Kirin's Isozaki and Carrefour's de Colonges. Both encouraged companies to start acting on nature today, and both used the same word to describe how companies should do so: "together." ♦



**WHAT ARE SCIENCE-BASED TARGETS?** The SBTN defines them as “measurable, actionable, and time-bound objectives, based on the best available science, that allow actors to align with Earth’s limits and societal sustainability goals.” The SBTN helps companies adopt a roadmap for integrated action on climate and nature by building upon science-based targets for climate, which help companies mitigate their GHG emissions through the Science Based Targets initiative (SBTi).

**Why set them?**

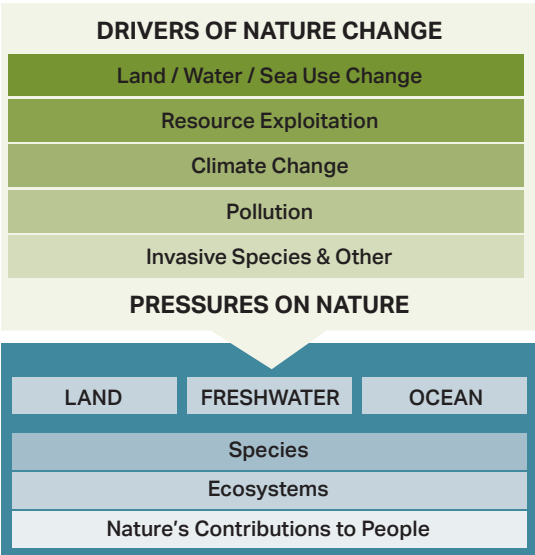
Aside from being the right thing to do—businesses depend upon the natural world, after all—the SBTN identifies **SEVEN AREAS**:

- 1. GROW INVESTMENT.** Investors are increasingly integrating environmental, social and governance (ESG) into their investment practices and ownership policies. Ratings agencies like Moody’s and Fitch now include nature-related disclosures in their assessments.
- 2. REDUCE RISK.** Over half of global emissions are now from countries with net-zero emissions by 2050 targets. Regulation around nature protection is rising.

- 3. OUTPERFORM.** Companies with higher sustainability scores outperform their peers.
- 4. ATTRACT TALENT.** Organizations that focus on sustainability are better placed to attract and retain talent.
- 5. INNOVATE.** Increased innovation amounts to billions of dollars’ worth of opportunities.
- 6. REPUTATION.** Strengthen your brand’s reputation by setting science-based targets for nature.
- 7. COLLABORATE.** Setting science-based targets for nature provides the opportunity to collaborate and transform.

**What areas will science-based targets for nature cover?**

As it finalizes the exact frameworks and methodologies for science-based targets for nature, the SBTN has shared high-level categories that those targets will include.



**What can companies do now?**

**The SBTN suggests THREE STEPS:**

**1 Understand your impacts and dependencies on nature.** Undertake a “root and branch” audit of your business that will enable you to identify and learn about your company’s most material impacts and dependencies on nature—and where they occur in your operations and across your value chain. SBTN offers detailed guidance on its website to help companies assess their environmental impacts.

**2 Measure and set targets.** Measure those impacts and dependencies on nature with proposed indicators and disclose them for transparency. Companies will soon be able to set initial targets on freshwater and land through the first release of SBTN’s science-based targets for nature. And, if you haven’t set science-based targets for climate with the SBTi yet, then do so.

**3 Lead the way.** Joining the SBTN Corporate Engagement Program puts companies at the forefront of ambitious corporate action on nature, and gives you the opportunity to help shape the final methods and tools. It will also give your company the chance to be part of a network of forward-thinking companies, to share experiences with and learn from, as well as get the latest advice from our technical experts.

**T**HE HEALTH OF OUR GLOBAL FOOD SYSTEM exists in a mutual relationship with the health of the planet's natural ecosystems. Research by the Economist Intelligence Unit across countries representing 80% of the world's population found that nature loss is being increasingly recognized as a dual crisis alongside climate change, by investors, regulators, businesses and consumers—one cannot be solved without confronting the other.

But where to begin? Few in the private sector are as well placed as Jenny McColloch to speak about the potential path to progress. McColloch studied earth systems at Stanford, has spent her entire career focused on sustainability and biodiversity—including an early post teaching children about marine environments—and today she serves as Chief Sustainability Officer for McDonald's.

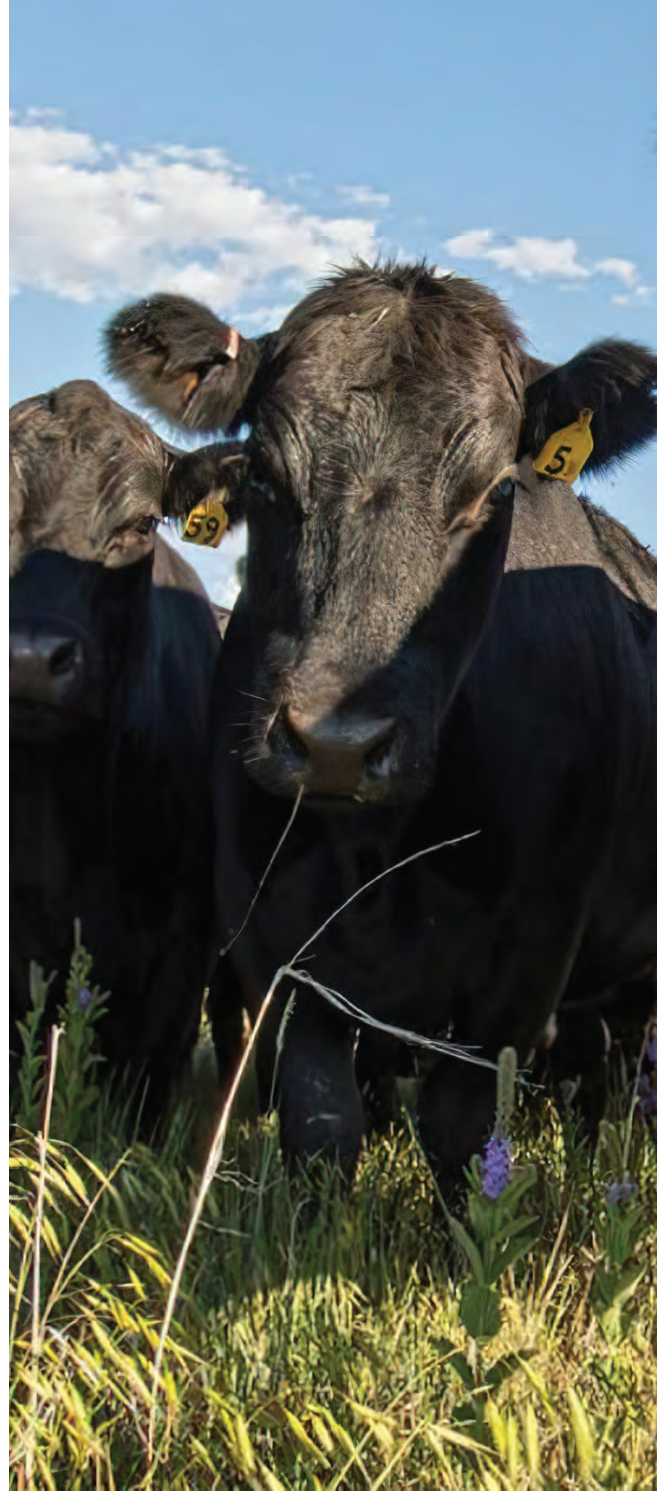
Her tenure—McColloch joined the company a decade ago—and role give her a unique view on how the conversation around nature has shifted. At a time when many companies have yet to set out meaningful targets related to nature—according to S&P Global research, four out of five S&P 500 companies haven't made a biodiversity pledge yet—McColloch and her team can share decades of lessons from the ground. The good news: making progress is possible.

**Biodiversity isn't an issue on every—or even a majority of—companies' radars. Why is it such a priority for McDonald's?**

We're in an interesting moment in time where there is an increasing focus from almost every sector of society on this issue as critical to our future—even

McDonald's is one of the largest restaurant chains in the world, operating in over 100 countries. Chief Sustainability Officer **JENNY MCCOLLOCH** discusses how a business of that scale is addressing biodiversity loss and the emerging global food crisis.

# TAKING ON NATURE LOSS AT SCALE







PHOTOGRAPHS: COURTESY OF MCDONALD'S

though we're still figuring out what all the right answers are for the path forward. The experience of the pandemic caused a lot of people to think more about how resilient any of our systems are—the infrastructure or food systems or natural ecosystems that our lives depend on.

We are deeply tied to these conversations at McDonald's. We're a food business and our restaurants and supply chain have a significant presence in communities and landscapes around the world. Together with franchisees and suppliers, our businesses depend on nature and ecosystems, as well as the people who manage those resources. And

**Based on latest public disclosures in 2020 and 2021, McDonald's was able to report that almost all of its beef, soy, palm oil, coffee, and fiber supported deforestation-free supply chains.**

consequently our brand depends on those people, and those systems. If we weren't focused on managing the risks where they are, and managing and working toward the opportunities where they exist, then we wouldn't be managing the McDonald's brand and our System's growth strategy properly.

Fundamentally, we have to manage our way forward here because McDonald's is a global food and restaurant company. This conversation is also heightened for us because McDonald's is a brand often in the spotlight, and a lot of different people around the world have strong opinions about what we need to do in this arena.



**How did you land on “supporting deforestation-free supply chains” as your ambition? It seems like carefully chosen language. Does it come from a lack of confidence about simply committing to being deforestation-free?**

We considered it very carefully when we set out to communicate metrics progress against our Commitment on Forests. When you look across the variety of commodities that we source, and the variety of measurement and tracking systems that are out there, there's a very different measurement approach and traceability opportunity, depending on the product in question. It's hard to measure such a complex



landscape. And there can be a tendency to focus on a single metric, rather than the broader direction of travel and progress across all priority products.

As we learned from advisors in this area, what we found in setting a vision for eliminating deforestation—and then working toward it over the last eight years—is that how you go from a vision to actually measuring and monitoring specifics over time looks different depending on where you are and what you're sourcing.

So for us, “supporting deforestation-free production” can encompass the variety of measurement approaches that are out there while also embedding this notion of continuous improvement. It was our answer to: How do we move everybody in the right direction while holding ourselves accountable across our highest-priority commodities for tracking and reporting progress over time?

**Is that complexity increased by your scale?**

Yes. We have the privilege of scale within the system we operate with our partners. We have a footprint and exposure in nearly every geography around the world in some way, shape or form. We have an

**“We have the privilege of scale within the system we operate with our partners. We have an opportunity and a responsibility to send a significant market signal—because of our scale.”**

opportunity and a responsibility to send a significant market signal—because of our scale.

We're a restaurant company that operates nearly 40,000 restaurants in over 100 countries around the world. Approximately 93% of those restaurants are owned and operated by independent franchisees or developmental licensee partners. Together with those owners, we employ about 2 million people under the Arches. And we all collectively depend on an entirely third-party supply chain. All the farms, ranches, supplier facilities and transportation systems that deliver the food and packaging we serve to our customers—they're all managed by independent supplier partners.

So, when you look at sustainability at McDonald's, and particularly a conversation on nature, biodiversity and resiliency, you have to see it through what we call our McDonald's “system” lens. Or another frame for it is the three-legged stool of the franchisees, the company and our supplier network, which has many layers, all the way back to the producers who are actually the land managers.

**How do you make progress as a company when a lot of that progress depends on the collaboration and cooperation of such a vast network of suppliers, farmers and franchisees, spread out across the world?**

The goal-setting and strategies start within McDonald's: We must create the momentum here by embedding nature into our approach to sourcing. But how we do that is informed by and executed through partnerships and collaboration with our suppliers, with our producers, with our communities of farmers and ranchers, and with input from external advisors.

Along with that come pretty significant expectation-setting and standard-setting in terms of the criteria through which we hold ourselves and our supply-chain partners accountable. An important part of that involves working with our strategic sourcing teams to create a forward-looking and two-way learning journey that's inclusive and invites people to join us—rather than one that's merely transactional or punitive. This approach is especially important when producers and suppliers face so many different pressures and surface such important learnings on any given day, in any given geography.

**How have you approached driving change across a supply chain as large as yours?**

From the early 2010s through to 2020, we focused on driving commodity-specific strategies. As you'd expect for a burger company, those include beef,



## IDENTIFYING PRIORITIES

Working with NGOs, including the World Wildlife Fund, McDonald's identified the key commodities in its supply chain that have the greatest impact on the planet and/or human rights and prioritized those for action.



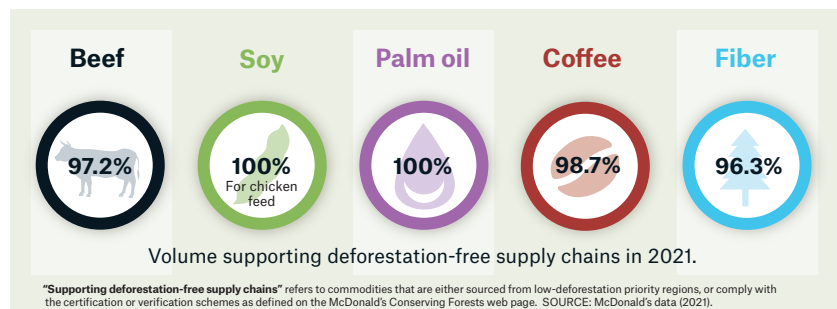
chicken and the soy-based feed for chickens. There's also the fish we serve in our Filet-O-Fish; the palm oil we source that's used as an ingredient in some baked goods; coffee; and the fiber for our packaging.

We worked with partners like the World Wildlife Fund, Conservation International, Environmental Defense Fund and other stakeholders and academic advisors with whom we identified impact areas and commodities that had the highest potential for us to drive impact for the planet and people—and prioritized where we should invest first.

We layered in more specific criteria related to supporting deforestation-free supply chains, reducing the emissions profile across that entire supply chain, promoting animal health and welfare, and supporting the communities of workers who produce the food. We set ourselves the goal of eliminating deforestation completely from our supply chain by 2030.

In some commodity chains, there were—and are—third-party criteria and coalitions that have defined standards for measuring and reporting against supporting deforestation-free supply chains that we could lean on. A variety of the mechanisms of the Roundtable for Sustainable Palm Oil allow us

In 2020 and 2021, McDonald's marked major milestones in its journey toward supporting deforestation-free supply chains: reporting near 100% compliance with third-party criteria for key commodities.



to verify that the palm oil we source is responsibly produced. The Rainforest Alliance offers a similar verification with coffee, particularly in areas of high deforestation risk, and supports robust tracking opportunities in the coffee-production chain. Such third-party certifications are not a perfect, be-all, end-all strategy on their own, but they really helped us get going.

And in 2020, when we were able to report nearly 100% compliance with those criteria on our priority commodities, it was a major milestone for us.

**So let's talk about beef, which is one of the key challenges for McDonald's. What have you been doing there?**

Beef production is different; there were no criteria or definitions around responsible, sustainable beef production when we began on this journey. That's why we became a founding member of the Global Roundtable for Sustainable Beef; we wanted to gather a sector-wide view and multi-stakeholder coalition to help define those terms and clarify standards. We then invested with third parties—including suppliers, NGOs like Proforest, and technology providers like Agrottools—in tracking and monitoring systems.

That allowed us to measure more consistently for the first time, to set baselines, to track where deforestation risk may be escalating in the beef farms and ranches, to set cut off dates, and then monitor how the progress is going. Those systems simply didn't exist when we set out on this journey. They're what allow you to see if things are moving in the right direction, and if they aren't, you can decide to either set a corrective action plan for suppliers and producers or move away from them.

**Some say beef production itself is the problem and needs to be stopped. What's your view?**

I take the philosophy, having worked within this system as long as I have, that simply moving away from something won't always deliver the desired outcome. I've had people tell me, for instance: "McDonald's should just move everybody away from beef; that'll solve a lot of environmental problems." But alongside offering delicious non-meat alternatives where customers want them—which we're also working on—we see our role as helping empower customers around the world who do eat beef to expect products that are produced through brands, suppliers and producers that prioritize responsible production, who have measures and programs in place to improve, and who protect our nature, ecosystems and communities in the process. I think that's a better outcome than customers purchasing a burger from a company that doesn't share that level of commitment.

Coming out of 2020, over 99% of our beef was sourced from regions supporting deforestation-free production. We're proud of that progress, but it's something we have to keep measuring and monitoring each year. The landscape's evolving, there are a lot of different pressures and incentives for producers to make decisions based on what the regulatory and market-demand environments ask of them. And there is always more to learn from our world's farmers and ranchers.

**"There were no criteria or definitions around responsible, sustainable beef production when we began on this journey."**

**So where is the next level of progress coming from—because it's not all fixed yet? What are the opportunities to do more?**

When well-managed, farming can be regenerative and part of climate solutions. Farmers and ranchers are some of our best advocates in helping to protect and promote biodiversity. So it's important to be learning and thinking about both sides. How can we minimize environmental damage? Yes, that's critical. But we also need to be asking: How can food production enhance nature and ecosystems? How can protecting biodiversity go hand in hand with improving the livelihoods of farmers and communities?

We're partnering in a whole host of different projects and production contexts to help add more examples and data into this conversation. We have projects active or in the works in the US looking at different rotational grazing programs, and the soil health, biodiversity and carbon sequestration opportunities that different grazing practices can have in cattle ranching. We also have work under way in France, the UK, Ireland and the US around regenerative agriculture adoption to show how responsible production can be a positive, regenerative force for both the communities and producers.

So, it is important to acknowledge that responsible cattle grazing can be a real enhancer to a landscape, both in biodiversity and carbon sequestration opportunities, as well as resiliency to floods and droughts, the climate events that we're seeing. And it's also key to the viability and success of our rural communities.

**An emphasis of yours has been to help spark sector-wide initiatives; to encourage others to act. But outsiders might look at the work you're doing, see the nature problem getting worse on a global scale, and wonder, "what's the point?"**

No amount of individual action can substitute for the power of collective action. The commitments we make as McDonald's and our partnership network are not the entire global food economy. Nor do we have the ability to affect change alone. These systems are big; they are slow to change. In McDonald's, we have set commitments for our sourcing, our volumes, our brand and partnership approach and, at the same time, we have been deliberate all along to try to influence sector-wide conversations and advancement.

We also look at how we can collaborate on landscape scale initiatives that don't just seek to influence the volumes that we source or the suppliers we source from, but the wider landscape that they and we are involved in. For a few years now we've supported the Jaguar Conservation Fund in Brazil, for



instance. It looks at the environment in some specific areas where we source, and how that can be farmed in a way so that an apex predator like the jaguar—a sign of a healthy ecosystem—can thrive along with cattle production. That, as you can imagine, is a complicated issue for cattle farmers. But it's an example of how we can collaborate with others to affect change beyond our suppliers and on the specific landscapes that we source from.

**Few companies have got going on nature-based solutions as yet and are asking: How do we begin?**

What we can all do is motivate through our supply chains and partnerships to help move the system. All companies should be asking suppliers, “How are you managing climate risks? How are you safeguarding forests and biodiversity? How are you empowering farmers?” That's how to get started: learn more, understand the exposure and opportunities. It is down to the retail and consumer-facing brands at the front of these supply chains to ask those questions and hold themselves accountable.

**What's your response to the suggestion that one solution to make the global food system more sustainable is to make it more local?**

It's easy to talk about one food system when, really, there are many food systems globally. Except for a few geographies in the world, anyone who drinks coffee depends on a global food system and global trade; anybody who enjoys McDonald's fries around the world depends on global production, because there are very specific climatic and geographic ecosystem zones where we can grow certain crops that are consumed the world over.

Other food production systems can certainly be more local in nature. There are a lot of benefits to local food production where that's appropriate—we saw a lot of those benefits at the peak of the pandemic. Food culture is so variable around the world, and people enjoy eating different foods produced in different regions, which is a good thing. So it's important to consider the interconnectivity between the production for individual farmers and ranchers, the management context depending on how big or small their operations are, and then the wider regulatory and trade context in which they operate.

However much we produce and source locally, most people in the world will still always have connections to our “global food systems” realities.

**You've mentioned these issues vary by region, by commodity. That seems at odds with the push**

“Now we also have to look at how can food production support nature, ecosystems and biodiversity.”

**ALASTAIR MORTON**  
is a Partner in Brunswick's Business & Society practice, based in London.

**to simplify and consolidate ESG reporting and frameworks into a single global standard.**

We're a member of the working group for the Science Based Targets initiative's Forest Land & Agriculture project, which is looking at the targets and practicalities of accounting in global supply chains—what can we measure and how can we reduce emissions? And we're collaborating with others through the Taskforce on Nature-related Financial Disclosures Forum to find common ways to assess and address our impacts and dependencies on nature.

This isn't easy. As you say, there are challenges to focusing on one metric at a time. If you only focus on carbon reduction, for instance, you can over-index on a conversation about carbon budgets and lose some of the local context and principles needed for supporting nature-enhancing decisions. With beef production specifically, it's easy to focus on the carbon emissions rather than the regenerative, biodiversity- and soil-health enhancing aspects of responsible cattle grazing and adaptive management.

We have to find ways to weave in regionalized, commodity-specific approaches. Some of the considerations around responsible beef production, for instance, are going to look different in Ireland than they do in Australia or Brazil or the US. At minimum, it would be great if we can work toward more explicit acknowledgment that nature and food are key parts of our global climate agenda. It's important, as we look at metrics and frameworks, to talk to companies and brands about how they're actually managing this in practice and driving action at scale. Because any single framework, methodology or metric isn't going to be enough.

**With the extent of forest being lost, the numbers of species facing extinction, the outlook is deeply alarming. Are you at all hopeful?**

It's very alarming. Just pick up the latest issue of *Nature* or *Science* and you'll find plenty that's deeply worrying. I recognize the challenge that we have; I've been in this line of work for a long time. We could get bogged down discussing the challenges forever. But we have to put our energy toward driving action. We have to ask: “How can we take responsibility collectively as a private sector, as individual companies, as individuals, for the ecosystems that we depend on and communities that depend on those ecosystems?”

I'm encouraged by the energy around the conversation right now. We have the world's attention. I try to be hopeful and optimistic because I feel we have to; we don't have a choice. We've got to work together to change the status quo, and we can. ♦




**"H**OW INAPPROPRIATE TO CALL THIS PLANET EARTH," THE science-fiction writer Arthur C. Clarke is credited with saying, "when it is clearly Ocean." The line speaks not only to the fact that oceans cover 71% of the earth's surface, but also the tendency for land-dwelling humans to overlook their importance.

- Oceans are (merely) responsible for "driving weather, regulating temperature and ultimately supporting all living organisms," says the US National Ocean Service.
- There is no tackling climate change without tackling the nature crisis—and there is no tackling the nature crisis without addressing the oceans. The UN calls the ocean "the world's greatest ally against climate change." It is the world's largest carbon sink, storing 50 times more carbon dioxide than the atmosphere, and "the reason we're not experiencing more or worse climate impacts than we already are," according to

UN Foundation Senior Advisor and Senior Director for Ocean and Climate Susan Ruffo.

- Absorbing all that carbon has made the oceans warmer and more acidic. That has disturbed fragile ecosystems—14% of the world's coral reefs were lost in a single decade—and threatens the marine species that depend on them, which the UN estimates could number as many as 10 million.
- As climate change harms the oceans, so does the human activity driving that change. Overfishing has depleted fish stocks—migratory freshwater fish have declined 76% since 1970—meanwhile pollution has choked the water and marine species. The infamous Great Pacific Garbage Patch, pictured below, covers 620,000 square miles—three times the size of France. There are four smaller garbage patches like it. By 2050, there could be more plastic than fish in the ocean.
- As ever with the oceans, it can be difficult to grasp the scale: not only of

# New Solutions for the OCEANS



The Great Pacific Garbage Patch, located between Hawaii and California, has become a symbol of the plight of the oceans. Even so, it is below the surface that restoration of the oceans is most needed.



the problems, but also the potential of solving them. Restoring the oceans can remove carbon from the atmosphere, lessen the severity of climate change, help feed the world more sustainably and enrich the world's biodiversity. • For that to happen, there needs to be systemic change—in industries ranging from food to transportation—and massive technological innovation. Brunswick spoke with five companies, large and small, helping pioneer that innovation and working to change systems. Those conversations have been edited and condensed. • At a time when so many stories about the oceans are dispiriting, these companies inspire a sense of hope. "If we weren't hopeful, we wouldn't be doing this work," Running Tide CEO and Founder Marty Odlin told Brunswick. "But optimism is not a license for complacency. We are hopeful that ocean health can be restored because we are doing the work to restore it."

## 5 PERSPECTIVES FROM COMPANIES BIG & SMALL

**ØRSTED**, the world's largest developer of offshore wind power, is designing wind farms with nature in mind. *Pg. 32*

**RUNNING TIDE**, in Portland, Maine, heals the ocean through everything from shellfish farming to carbon removal. *Pg. 34*

**CCELL**, headquartered in London, creates artificial reefs that enrich biodiversity and help combat coastal erosion. *Pg. 35*

**PLANETARY TECH**, headquartered in Nova Scotia, Canada, transforms mine waste into a safe "antacid" for the ocean. *Pg. 36*

**CLEARBOT**, headquartered in Hong Kong, builds self-driving boats powered by renewable energy and AI. *Pg. 37*





# Renewable Energy in Harmony with Nature

## Why is ocean biodiversity a problem Ørsted cares about? What are the problems you want to solve?

I'd say it's only within the last few years that the world—and I'd include ourselves—grasped how interlinked climate change is with the nature crisis.

It cannot be said often enough: The first thing the world needs is to stop extracting and burning fossil fuels. That is the largest contributor to stopping the destruction of our planet. As the market leader in offshore wind, we play a key part in the transition to renewable energy—and when we build those renewables, we obviously want to help halt the loss of biodiversity, whether that's on land or offshore.

The dialogue about the importance of oceans really began at COP26 in Glasgow and then continued at COP27 in Egypt. As the world's leading wind energy operator, we are a key actor in that conversation, albeit a newer one compared to the shipping industry, fishers, the defense industry and tourism.

Talking about offshore wind means also talking about marine spatial planning. To meet the 1.5°C scenario, the world needs to build out offshore wind fast. In this decade alone, the global offshore wind capacity is expected to increase by a factor of seven.

## What's the impact of offshore wind energy on our oceans' biodiversity?

During the construction of an offshore wind farm, two of the main impacts are local habitat change around foundations and noise when piling the foundations into the seabed, which can be harmful to marine mammals. As the wind turbines operate, the spinning blades can pose risks for birds.

We've implemented measures to avoid or mitigate these risks during the construction and operation phases. But the broader conversation is focusing more on actually being a force for good.

## Can you say more about those measures to avoid or mitigate?

To protect marine mammals from noise during construction, for instance, we can use underwater curtains of air bubbles around individual foundations that can reduce that noise outside of that bubble-curtain significantly. In deeper waters it may also

**ØRSTED** is the world's largest developer of offshore wind power. **INGRID REUMERT** is a Senior Vice President with the company. She talks about designing wind farms with nature in mind to Brunswick Partner **WOLFGANG BLAU** and **IGNACE BEGUIN BILLECOCQ**, Oceans lead at the UN Climate Change High Level Champions.



Ingrid Reumert joined Ørsted as Senior Vice President, Stakeholder Relationships, in May 2022. She told Brunswick: "I came here because of the vision: create a world that runs entirely on green energy."

be possible to use floating wind turbines over fixed-bottom foundations that do not require piling.

## Which then can be positioned farther offshore?

They still need anchoring on the ocean floor, but they don't need as much piling activity as fixed-bottom foundations and you can reach different depths with them. But again, the new paradigm is to actually be net positive for the ecosystem you are operating in.

## What could "net positive" look like?

We are working with NGOs and scientists from different universities to try to find out.

In the North Sea's Humber region, where we run the world's largest wind farm, we are doing a seascape restoration project that includes reintroducing half a million oysters and restoring sea grass and salt marsh. In Denmark, we are experimenting with 3D-printed reefs and in Taiwan we are testing whether corals can grow on offshore wind turbine foundations.

One of the main challenges is understanding how to measure biodiversity, particularly in the marine environment, so that you have metrics and are able to measure whether you are making a substantial, positive difference.

We are working on developing our own measurement framework in line with disclosure frameworks such as Taskforce on Nature-related Financial Disclosures and target-setting frameworks such as Science Based Targets for Nature.

No one has all the solutions yet, but we have to experiment, learn and test rather than sit and wait for the method to arrive from somewhere else.

## With wind farm projects growing larger, there are reports that some projects are inadvertently becoming fish sanctuaries as trawlers don't want to enter these areas for fear of their nets getting caught in wind turbine foundations. Is that true?

As a renewable energy developer, we strive to ensure co-existence with other marine users. In places where fishing is not allowed in operational wind farms, it's possible that local fish populations may grow, but that depends on the specific location.

## I would imagine some of your investors might say: "Wind energy is so much cleaner than fossil-fuel extraction in the oceans. Do we really have to attract public attention to the negative impacts of our company on ocean biodiversity?"

It's true that we have to maintain proportionality





here and not forget just how much better wind energy is for our oceans than the extraction of oil and gas.

Having said that, we have to do everything in our power to minimize our impact and actually improve biodiversity. What is key here is to account for biodiversity as early in a project as possible. These wind farms have a lifetime of up to 50 years, so addressing biodiversity early can have a lasting positive effect.

**You're tackling a systemic challenge that is bigger than Ørsted. At Brunswick, we often see leaders organize industry-wide coalitions, pushing for regulatory changes that mobilize their industry. What are your policy-focused activities?**

We work both within our industry, through industry organizations, and across industries. We are co-founders of the Climate Group's SteelZero initiative and the World Economic Forum's First Movers Coalition, with the aim to decarbonize steel. We are

**Ørsted, which built the world's first offshore wind farm, now has wind farms off the coasts of six countries, including the US, UK, Taiwan and Denmark.**

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**WOLFGANG BLAU** is Managing Partner of Brunswick's global Climate Hub and co-founder of the Oxford Climate Journalism Network at Oxford University, a global network that trains journalists from more than 250 leading news organizations each year on how to improve their climate journalism. He is based in London.  
**IGNACE BEGUIN BILLE-COCQ** is Oceans lead at the UN Climate Change High Level Champions.

founding members of the coalition's "near-zero" concrete commitment as well. We also speak with the automotive industry to create broad demand for these new technologies.

And then there is our work in the policy space. Most of our clients are, effectively, governments. We try to inform them during the tender phase about the importance of biodiversity in commissioning wind farms.

**What advice can you give on working with NGOs? What works? What doesn't?**

The best is to create proper partnerships. The years of off-the-shelf sponsorships are over—I'd call those marketing initiatives, which might serve a purpose but don't generate real change. Create joint projects with measurable targets. And realize that there can be friction between the NGO mindset and the corporate mindset.

When you make it through that friction, and learn to look at things from the other side, good things can happen. ♦



# An Operating System for the Ocean

**“Carbon buoys made from forestry residue and limestone, and seeded with kelp” isn’t a solution that jumps to mind when we think of tackling the carbon crisis. How did you arrive at that?**

Even with my background in ocean operations, I didn’t actually start by looking at the ocean. I’m an engineer, so I started by looking at first principles. Carbon removal needs to become the largest mass-moving exercise in human history. According to the IPCC, just to keep the world from surpassing 1.5°C of warming, we are going to have to move 660 gigatons of carbon from the fast cycle (atmosphere, biosphere, upper ocean) to the slow cycle (geological reservoirs and the deep ocean). And +1.5°C itself is a pretty awful world. To stabilize the climate and secure the future for all life on Earth, we need to collectively move back the 2,000+ gigatons of carbon that we moved from the slow cycle to the fast cycle since the Industrial Revolution, primarily by burning fossil fuels.

That’s the overarching challenge, so I started looking at pathways for carbon removal. I’ve seriously

**RUNNING TIDE**  
Founder and CEO  
**MARTY ODLIN**  
speaks with  
Brunswick.



**Marty Odlin founded Running Tide in 2018. The company is building technology to map—and also help restore—the health of the ocean.**

considered and studied the operations of direct air capture and other high-order systems—but realized I couldn’t make the logistics work out. We have to move mass in ways that are energy efficient, ecologically restorative, and scalable. There is no better way to move mass on the planet than through the ocean, and nothing scales better than natural systems. The ocean’s biological pump is an already incredibly powerful natural carbon sink, transferring about 2 gigatons of carbon from the fast carbon cycle to the slow carbon cycle each year.

You are right that one iteration of our system will combine forestry residue, coated with alkaline materials and seeded with macroalgae. This iteration has a number of advantages. Our materials are sustainably sourced and designed to increase mass transfer of carbon from the fast cycle to the slow. Forestry residue and agricultural residue (which would otherwise be burned or left to decompose) is repurposed into our buoys. The buoy’s coating dissolves to combat ocean acidification. Macroalgae, of which kelp is a species, can grow very fast, and pull carbon out of the atmosphere and upper ocean as it grows. We are continuously iterating upon our system design to optimize for scalability and sustainability, so that we can best amplify the ocean’s natural capacity to restore itself.

**Looking at what Running Tide does, John Muir’s line comes to mind: “When one tugs at a single thing in nature, he finds it attached to the rest of the world.” Because you don’t just create those buoys, but also restock shellfish beds, enhance macroalgae, plus a handful of other initiatives to restore the health of the ocean. Is there a risk, as a smaller company, in trying to tackle so many issues simultaneously?**

Yes. Absolutely. But it’s the correct way to do it. We are building a platform to understand the ocean and find ways to intervene positively, and in that, the John Muir line is precisely right. You can’t build an ocean alkalinity company and ignore how the change in pH and aragonite affect the health and distribution of the flora and fauna in the surrounding waters. You must understand the system.

We are building Running Tide with the aim of being a platform for positive ocean health interventions. We have developed a sophisticated suite of ocean health diagnostic, monitoring and verification tools. This includes innovative and cost-effective hardware and software measurement systems and cutting-edge ocean modeling techniques that work in tandem to refine each other and our



collective understanding of ocean health and ocean health interventions.

**Your sources of revenue are selling oysters and clams, and will eventually include selling carbon offsets. What sort of growth are you envisioning—and what sort of financial returns?**

Without getting into the financial details, at the highest level, we envision that Running Tide will be an operating system that connects capital to nature and assists the world-scale mobilization effort to save natural systems. We will be enabling a global supply chain to solve environmental challenges, and providing insights and understanding to a variety of partners and governments. Ecosystem service credits (carbon removal, offsets, nitrogen abatement, alkalinity enhancement, environment restoration) will flow through our systems into voluntary, commodity and compliance markets around the world. We will be partnering with governments, militaries and merchant marine fleets to execute Earth-scale solutions to the climate crisis. We will be supporting projects large and small in communities around the world, ensuring equitable participation and distributed benefits in the effort.

**What's the biggest challenge your business is facing at the moment?**

This stuff is complex. It's a new vision for how to integrate capital and natural systems, and the language and communications pathways haven't been fully developed. So just getting out the message about what we do and why and how it will work today, tomorrow, or 10 years from now is difficult.

**If you had every Fortune 500 CEO in a room, what would your message to them be?**

Same thing I say to myself every morning: What will your children and grandchildren say about you and the mark you left on the world?

The carbon removal and climate services markets are unequivocally the biggest opportunities of the 21st century. Any company seeking to remove their emissions, attract and retain talent, win the next generation of consumers and make a positive contribution in the world while being at the cutting-edge of innovation should be looking at ways to invest in the natural capital systems. Ocean health and ocean ecosystem services like carbon removal offer unparalleled opportunities. They should be at the center of our collective efforts to restore the health of our planet, just as the ocean is at the center of our planet's system. ♦

# Building "Digital Living Reefs" to Save Shorelines

**WILL BATEMAN,**  
CEO of CCell, speaks  
with Brunswick's  
**ALEX BURNETT** and  
**JACK STEWART.**

**How important is it to find a solution to coastal erosion?**

Over half of global coastlines are being eroded, as climate change drives larger waves and more frequent storms. Miami University put out a fantastic paper that showed that the global wave energy is increasing by 0.41% year on year. And when we've looked at that same data for Mexico, you're seeing changes of sort of 1 to 2% in places per year. That doesn't really sound like a great deal, but when you accumulate this over a decade you get 20% more energy in the sea. Our goal is really to try and take the edge off the waves, to wind the clock back.

**And why coral reefs?**

Soon after Hurricane Matthew [in 2016] I went to see my sister, who lives in Grand Bahama. It was striking, walking along her coastline. Where there were reefs, the houses had wind damage and trees were disheveled, but they hadn't lost any land. When you went further up the beach to where the reef stopped, people were losing their entire gardens. It was quite dramatic.

The core issue we're trying to solve is: Can we replicate natural coral reefs? Can we bring in that protection that natural coral reefs provide to vulnerable coastlines?

**Steel forms the backbone of CCell's reefs. The company then uses seawater electrolysis to grow calcareous rock around the steel, to which plants and coral can attach.**



**People have tried to protect coastlines by doing everything from sinking concrete to sinking ships. Why is your solution better?**

If you look at the conventional approaches, I'd argue they haven't changed since the time of the Romans. You get a pile of rocks or concrete and you pile these up until something happens. That's the basis of most breakwaters.

If you look at natural coral reefs, on the other hand, which protect the Maldives and many other places, they're actually working a little bit more subtly below the surface to affect change at the surface. They themselves don't take the brunt of those waves. It's estimated around 25% of all the marine life that we know of is either born on or lives in coral reefs, and we have lost 50% of our coral reefs—in the Caribbean they've lost 80%. We've got to start to really seriously think about how to restore our balance.

We looked at that and said: Can we engineer a lightweight structure like a reef? Currently we make them from steel, which can be manufactured in bulk in a factory—150 meters of reef fits into a single container for transport. A lot of design work went into making units that stack together a bit like super-market trolleys.

**How do you turn that metal structure into a reef?**

We use a technology called mineral accretion. This passes a small electric current through the water around the structure which causes sea-water minerals to form rock crystals. This is similar to limescale that forms in kettles, except instead of boiling the water, we increase the pH of water around the reef. The structure goes from being lightweight to a reinforced heavy mass that can then provide resistance against the waves. Our goal is for a reef with 20% porosity, having started at close to 90%. We monitor the reef remotely and use renewable energy wherever possible. Corals or bivalves are able to rapidly thrive upon our reefs; they offer a haven for diverse marine life, just like natural reefs.

**Where have you installed these so far?**

Most of our work has been in Mexico. Our biggest installation is 120 meters long in a place called Telchac. We've got a number of smaller pilots in Cancun. We finished a project out in the Isle of Man where we had three pilot units. And we've been running pilot units in Israel, testing out and optimizing the actual rock growth itself. ♦

**ALEX BURNETT**, a Partner, and **JACK STEWART**, an Associate, are with Brunswick's Business & Society team.



## An Antacid for the Ocean

**PLANETARY TECH** transforms mine waste into a carbon-removal tool. **PETER CHARGIN**, a Vice President at the company, speaks with Brunswick.



Planetary Tech transforms waste from mines into alkalinity that can safely be added to the ocean. Above, a sensor Planetary Tech uses to monitor that process.

**Why does the ocean need to be given “an antacid,” and how does that help with carbon removal?**

Right now, the ocean and the atmosphere are in equilibrium as far as CO<sub>2</sub> is concerned. Unfortunately, over the last 150 years, a lot of the CO<sub>2</sub> that we've added to the atmosphere has migrated into the ocean. And when you add CO<sub>2</sub> into the ocean, it becomes more acidic. If you add a base to an acid, it neutralizes. When it neutralizes, that reduces the amount of carbon dioxide in the ocean. Since the atmosphere and the ocean are going to reach equilibrium, that means the ocean will draw down carbon dioxide from the atmosphere.

You can make a really big difference in the atmosphere and only make a tiny difference in the ocean. If you removed all of the post-industrial era carbon dioxide that the world has put into the atmosphere, it would make less than a 1% difference in the amount of carbon dioxide in the ocean. It's like a coffee mug versus a bathtub.

**And you produce that “antacid” by using products from mine tailings. Is that safe?**

Yes. All the science says this is safe. We're just accelerating nature's process—what's called the geologic carbon cycle. It's a natural process that involves the acidity of rainfall reacting with rocks, and the water



eventually winding up in the ocean. It's exactly the same process. You have to get alkalinity to add it into the ocean, and it needs to be pure. We've developed the process to create and purify alkalinity, and we're scaling up now.

We are starting projects around the world to add alkalinity into the water and validate that all the science and all the content is actually true. We're starting incrementally, and then growing over time, as we become more confident that what we believe is true is actually true.

And to put all of this in perspective: We're adding a few thousand tons of alkalinity to the ocean, compared with 38,000 billion tons of carbon the ocean holds. A trace amount, in other words. The good news is that it only takes a small amount of change to make a difference.

**Planetary Tech was awarded the X Prize from the Elon Musk Foundation. Do you have any other sources of funding or revenue?**

Yes, we have revenue. It's small right now. Most of our funding has come from grants and venture capital. But this year, we will be selling, for redemption in 2023, between 2,000 and 3,000 tons of carbon credits. And then next year, we'll be selling between 10,000 and 20,000 tons, so that will make us one of the largest carbon removal companies on the planet.

**Planetary Tech's mission is to remove a billion tons of carbon dioxide. Is that realistic?**

Yes, it is realistic. It won't happen overnight.

One of the challenges we face is public knowledge. People just don't know what carbon removal is. There's no draw from the public to say, "We want to support permanent carbon removal." If there were that pull, we'd be able to move much more quickly because there would be more of a requirement from governments and industry to provide these high-value permanent carbon credits. But they're not available now.

It also takes time to scale—it's a challenge any new industry would have. It takes time to build the many production facilities that we need to process the mine tailings and produce the alkalinity. And to do it in a way where we're making sure we're a trusted provider. People aren't sure they should trust organizations that are claiming permanent carbon removal. We want to do projects in places where the local communities really want us to be there.

But by 2035, 2040, we will be in a place where we're able to get close to that gigaton removal we've talked about. ♦

# Self-Driving Boats Powered by AI & Clean Energy

**CLEARBOT** CEO  
**SIDHANT GUPTA**  
speaks with  
Brunswick.

**Clearbot came out of a student trip, right?**

My co-founder and I went to Bali in 2019. I was studying computer engineering at the University of Hong Kong. He was studying computer science, specializing in artificial intelligence. We found out the university would pay for your flights and hotels if you did a student project. And we really wanted to go to Bali. So we went, and saw that these surfers were going out every morning and pulling out trash from the water. We spoke to the local government there and found out they spent a lot of money on the issue because they depend heavily on tourism, and tourists don't visit dirty beaches. And while we were there, we actually put together the first concept of our boat; we built it out of aluminum and some local materials. It was a pretty crappy-looking box.

When we came back to Hong Kong, we saw something similar in the marina with these diesel- and petrol-powered boats fishing trash out of the water. We worked out that, because of the amount of fuel they're burning to collect so little waste, they were actually creating more pollution than they were cleaning up. It's a broken system.

Clearbot's boats are being used in Hong Kong and India to do everything from collect trash to remove invasive plant species.



**Who are your customers?**

Governments first and foremost. We work with basically any marine environmental department. We're working with the government in Hong Kong and we just expanded into India. There are also government contractors—our boats clean up construction sites and can also do marine inspections. In marine construction sites, usually you need to do inspection work under the water or on the surface. It tends to be expensive and dangerous. Our boats have cameras on board and can be driven remotely, so it's cheaper and safer.

We also work with property companies—luxury hotels with waterfronts, yacht marinas, that want to keep the water clean.

Finally, we partner with companies. Microsoft, for instance, helped us to train our machine-learning models. Other companies sponsor a boat. Sponsorships are usually about marketing or carbon credits. And we'll use that sponsorship to try to get the government to support the project after their sponsorship ends. Governments don't want to try your product, they want something that's working; they want to see a six-month pilot before they order. So the sponsorships are actually really helpful.

**The boats pick up more than trash, right?**

Yes. They can deliver up to 200 kilograms of cargo, for instance.

But just on pollution removal, they also remove invasive vegetation and can clean up small-scale spills. Another problem, and this is big in India, is that foam develops on the surface of lakes because of pollutants in the water. Our boats actually break down the foam.

**“We’re not the ultimate solution to ocean plastic—we’re something in a portfolio of solutions. The bigger picture for us is decarbonizing the ocean.”**

The idea for Clearbot came to Sidhant Gupta (right) and Utkarsh Goel while the pair were on a student trip in Bali. Sidhant leads the business as CEO, while Utkarsh is the company's CTO.

**How?**

It pulls water up with a small water pump, and then sprays it back on to the water surface, breaking the foam down. That leaves an oil on the surface, which the boat picks up.

**What happens to the trash once the boat gets back to its docking station?**

It's site-specific. In Hong Kong, for example, with the government sites, they have a designated contractor to collect marine waste. In India, we hired a recycler to pick up waste from our boats, recycle it and share the data of what percentage is recyclable, what percentage was waste, and so on.

**What sort of impact has your work had so far?**

There's this part of Hong Kong's harbor called the Wan Chai Basin. People live there in apartments along the Harbor, and it's also a fairly big tourist spot. The government had opened a little space for people to rent paddle boards. That site was one of the dirtiest sites that we've had. Our boats were pulling out so much trash. You saw a very immediate, very direct impact. And there was a lot feedback from the community

Going forward, I think our most impactful projects will be in India, because we're targeting the Ganges River, and in Kerala we're doing a lot of the backwaters. These are critical waterways. And we'll not only have an environmental impact—there's a lot of waste in the water in India—but we'll also be supporting the water infrastructure for the country. A lot of the economy depends on these waters being navigable and clean, for boats to be able to move around. Having waste in the water is a real problem. It gets stuck in pillars, it causes damage. And so we're actually adding value.

**You're working on marinas, rivers, lakes, shorelines—preventing trash from getting to the ocean, in other words. But you're not collecting trash from the ocean just yet.**

To get to the open ocean, we need a bigger boat, something that could survive the waves and the weather. We're building a business flywheel that allows us to generate enough revenue so that, in a few years, we can start building a larger boat and tackling bigger problems.

We're not the ultimate solution to ocean plastic—we're something in a portfolio of solutions. The bigger picture for us is decarbonizing the ocean.

Every time we can replace manual, petrol-powered boats, we're part of that solution. ♦





# HEALTH & NATURE

## A Critical Intersection

**G**SK SEES PROTECTING NATURE AS BOTH A health and business imperative. CEO Emma Walmsley spelled it out publicly in a report published at New York Climate Week in 2022: “We know that taking action now will make our business more resilient, protect our supply chains, and support growth in the long term. It makes good business sense as well as being essential for the health of the planet and people.”

But as yet, despite rising agreement that something must be done, there’s no established roadmap for corporate action. Momentum is building behind new frameworks for target-setting, action and disclosure, but the expectations of business are far from standardized.

Not waiting for nature-positive standards, UK multinational **GSK** is taking action and a leadership role in the pharma and biotech sector.

By **ALASTAIR MORTON** and **ELLIE FALLON**.

“The problem remains complex, with multiple pressures playing out in local ecosystems, all around the world,” says Claire Lund, Vice President of Sustainability at GSK.

As a leading British biopharma company, GSK sees that as an opportunity, as well as a risk to be managed in the same way as climate. Rather than waiting, the business is working now on the nature transition, taking steps in a way that can highlight a potential path forward for others.

In November 2020, GSK became one of the first companies to commit to having a net-positive



impact on nature by 2030, alongside its net-zero climate pledge. And by sharing their learnings as they go, GSK is setting out to be a leader in their sector and across their value chain, and to help others to take action.

The company has highlighted the many, critical intersections between climate and nature. Habitat degradation and deforestation are increasing the risk of new human pathogens—and possibly new pandemics. The natural world is also a potential source of new drugs and other discoveries that could treat a variety of human diseases. Through observing processes in the natural world, scientists can find new solutions, while at the same time helping to ensure a more sustainable supply of raw materials for medicines and vaccines.

Her company's approach is to act immediately in areas where they feel confident they can create positive impact, Lund says.

"The work we are doing is showing the levers we can pull now. So we're taking no-regrets actions, even while we continue to develop the measurement frameworks for nature," she explains. "We'll accredit our approach when we can, but the imperative is to act now."

GSK admits it has faced challenges navigating the diverse and sometimes contradictory technical

**"Many companies can operate within one water basin, so collaboration is key to large-scale benefits here."**

approaches to water regulation—another area where a single, clear framework is needed. It's one of the first corporates to participate in pilots of the Science Based Targets Network for nature (SBTN) and Taskforce for Nature-related Financial Disclosures (TNFD) frameworks and has recently published some key findings.

Many companies will be familiar with Science Based Targets initiative (SBTi) criteria, which have helped to scale up corporate ambition on setting net-zero targets. The frameworks around carbon measurement, reduction and offsetting are now at least on the path to being well understood and widely agreed. The SBTN builds on this approach with an emphasis on helping companies understand their impact and dependencies on nature and the steps they can take to reduce it.

As part of its contribution to the development of the SBTN framework, GSK undertook a full value-chain materiality assessment to understand its own nature impacts and dependencies. This assessment, the company says, is serving to help ground their nature targets more firmly within their specific business realities.

Interestingly, and perhaps counterintuitively, GSK found that its focus needs to be much broader than just on the naturally-derived materials it uses. The pharma industry relies on products like palm oil, soy and cattle-derived products, but those are not where GSK's greatest impact on the natural world is found.

By going through the SBTN process they learned that their bigger impact was through the products they buy from suppliers, particularly active pharmaceutical ingredients—the part of their medicines that is responsible for the biological effect. For them, this highlighted the need to secure more sustainable supply of these ingredients, both for the resilience of their business and ultimately for people's health.

It's a complicated issue to tackle. So GSK is starting to work with its suppliers, running training programs and briefings, to enable them to make stronger climate and nature commitments. Already, a group of 10 global pharmaceutical companies, including GSK, is collaborating on a program called Energize. The group hopes to leverage their collective scale to facilitate their suppliers' transition to green electricity sources. In the future, it's possible to imagine a similar collaborative program for natural ingredients.

GSK says they have also found that identifying and harnessing the co-benefits of nature and



**Above, seedlings planted in a Trapeang Sankae Mangrove Sanctuary in Kampot, Cambodia, a mangrove forest rehabilitation area. Left, in Kenya, a mother puts her child to bed under protective netting.**



climate offers an opportunity. In November 2022 for example, GSK committed to restoring over 2,500 hectares of mangroves in Indonesia through community-led projects.

“This has a direct impact on nature locally,” says Lund. “But mangroves also play a crucial role in climate regulation because they help sequester carbon. And, by providing coastal protection, they help communities build resilience to rising sea levels.”

One set of GSK’s actions is focused on water usage and water basin resilience. Access to clean water is a basic requirement for human health.

Along with climate change, nature loss is fueling pollution and increasing the frequency of both floods and droughts. The Nashik region in the Indian state of Maharashtra, for example, has been a local wine capital since the 1990s and is also an important source of potato and onion crops. Farmers there rely on being able to reliably source clean water.

At its 47-acre manufacturing plant in the region, GSK has developed the infrastructure to harvest rainwater. Before 2016, its plants used water pumped from deep boreholes. Now, it no longer needs or uses them.

“Of course, many companies can operate within one water basin, so working in collaboration is key to delivering large-scale benefits here,” says Lund.



**Claire Lund**  
Vice President,  
Sustainability

That leads to another point the company makes: Where carbon emissions have global impacts, nature degradation is inherently local. So partnerships with local groups, governments and communities is key to figuring out what’s needed and what’s going to work best.

Businesses that choose to take action will find they are not alone. At COP15, a range of businesses from a variety of sectors were represented. And there are now coalitions of forward-thinking companies such as Business for Nature and World Business Council for Sustainable Development supporting and encouraging corporate action on nature and biodiversity.

Many companies have by now recognized how to engage in a “whole economy” transformation to get to net-zero carbon on the climate front.

Similarly, a standard set of expectations will soon emerge for the transition to a nature-positive world. The leaders are finding ways to set targets and transform their businesses now and are bringing others with them.

Their efforts will help shape emerging policy frameworks—and give confidence to policymakers that a private sector transformation is possible. ♦

**ALASTAIR MORTON**, a Partner, and **ELLIE FALLON**, an Associate, are both with Brunswick’s Business & Society team in London.

## INITIAL TARGETS GSK HAS IDENTIFIED



**CRITICAL AREAS**  
where nature, climate and health challenges intersect, and where immediate actions can help to drive change.

### AIR POLLUTION:

The impacts of air pollution are felt through asthma, lung cancer and coronary heart disease, among other health issues. GSK is part of the World Economic Forum Alliance for Clean Air, which is committed to reducing air pollutant emissions.

### WATER SECURITY:

Four billion people experience severe water scarcity for at least one month per year, according to UNICEF. Lack of clean, safe water has a direct impact on human health and disease spread, and climate change and nature loss are exacerbating the water crisis.

### FOREST PROTECTION:

Forests are fundamental to fighting climate change and biodiversity loss, and their destruction increases the risk of disease pandemics. GSK is part of the LEAF coalition, a public-private partnership to reverse tropical deforestation.

### HEALTHCARE RESILIENCE:

Global healthcare systems are set to face unprecedented climate- and nature-related pressures. GSK believes it’s vital to build greener, more resilient healthcare systems to provide crisis capacity.

### DISEASE BURDEN:

Climate change and nature loss will change the diseases we experience. This is already evident through the distribution of vectors such as mosquitos. New medicines and treatments will be needed to protect the global population.

### WELL-BEING:

Time in nature benefits mental and physical well-being, so GSK is putting nature protection and restoration efforts at the forefront of employee and community well-being efforts.

**I**N 2021, PEPSICO ANNOUNCED A POSITIVE AGRICULTURE ambition: to bring regenerative farming practices to 7 million acres of land by 2030, an area roughly equal to the company's entire agricultural footprint. The move was a response to the climate and biodiversity pressures affecting the food industry—not just to eliminate the industry's contribution to those crises but to reverse direction, making agriculture a sustainable contributor toward a climate solution.

"As one of the world's leading food and beverage companies, a resilient food system is essential to our business, and with our scale we have an opportunity and responsibility to drive meaningful change," CEO Ramon Laguarta said in the announcement.

# ROOTED

The commitment is part of the company's larger PepsiCo Positive or pep+ strategy, which intends to make all aspects of its business sustainable.

Brunswick's Lucy Parker and Brendan Riley spoke with PepsiCo Chief Sustainability Officer and Executive Vice President Jim Andrew, and he elaborated on the commitments to agriculture in the company's value chain and a path forward not just for his company, but for the entire industry.

**Let's start at the beginning: Why have you made a commitment to regenerative agriculture at this scale and speed a central part of your pep+ strategy?**

We're an organization that's rooted in the soil. We're about 55% food—which very few people know really. Even a lot of our beverages have agricultural roots, the coffee for our Starbucks products or tea for Lipton's beverages. Also, the sweeteners we use are based on corn, sugar cane or beets.

If we don't have farmers producing the products we need, at the volumes we need, in a way that works not just this year and next year—though, of course, that's important—but over decades, then we can't exist as a company. When you explain to people that this is existential for the company, they get it. We need a healthy agricultural system. We need crops that grow in regions that will increasingly come under stress. We need to help farmers build

resilience, so when violent weather events—a flood or a drought—come they can still farm. They know their livelihoods are secure.

**How do you communicate the change that's needed?**

I've found there's nothing like showing them the problem in the fields: Take a senior leader to a field that's been struck by drought. You show them what the products that have been grown using regenerative practices with healthy soil look like—then you show them a neighboring field where yields might be literally 2 to 3% of the previous year. That's very persuasive.

We've taken Ramon, our CEO, out to the fields several times last year. We take senior leaders out to farms to talk with farmers. Farmers are very straightforward. They say, this works, this doesn't, these are my challenges. We have some multigenerational farmers who have been growing our potatoes since their grandfathers did, and their fathers, and now it's being passed on to the sons or daughters. We need these relationships—because we don't grow potatoes, but we sure use a lot of them.

## in the

PepsiCo's Chief Sustainability Officer and Executive Vice President

**JIM ANDREW** talks to Brunswick's **BRENDAN RILEY** and **LUCY PARKER** about the company's actions and commitments to regenerative agriculture.

# SOIL

**Most people don't know what the term "regenerative farming" means; how do you describe it?**

It's a set of practices farmers employ to help build resilience and restore the health of their soil as they grow their crops. And that creates other benefits: increasing biodiversity, increasing water retention, reducing carbon emissions.

**What's regenerative about your farming program—rather than just minimizing harm? Let's not minimize the importance of minimizing harm, but what are you committing to that's identifiably regenerative?**

What we asked ourselves a few years ago was: How do we do more? How do we use our size to help farmers do more that's "good"—not just minimize harm. I loved what you said about not downplaying the reduction of harm—but now this is about how





you also rebuild resilience.

There are very clear practices that work to increase soil health: cover cropping, lower and no tilling, for example. We've got a playbook we've published of 25 practices that we encourage farmers to use. Farmers are business people, they're also stewards of the land: This is their way of life. You help farmers see why this is in their interest and then you make it easy—and in some cases, you incentivize them. We're not in the business of telling farmers what to do. We're showing them practices that if they adopt will generate benefits and allow them to continue farming for generations to come.

#### **How do you do that, in practice?**

We have a network of demo farms around the world. Those are farmers talking to farmers, and demonstrating what works. Not too long ago a farmer said

**A farmer practicing regenerative techniques examines a sample of the potato harvest. Right, Jim Andrew, Chief Sustainability Officer for PepsiCo.**



to me, “The best advertisement I have for regenerative practices is the huge windstorm that came through last fall and it took out my neighbor’s field and my field was still standing. Everybody around was coming to look at my field to ask why. The guy next door had very little of his crop still standing and 80% of mine was still up.” The reason was, in that location typically the farms have very weak soil and shallow structures; he had much more robust, much more resilient crops. So that’s a huge difference.

**You have an enormous global footprint and yet this is a farm-by-farm challenge. How do you go about training farmers?**

It’s hyperlocal. Every farmer will tell you not only that their farm is different, but that different parts of their farms are different. So we work with trusted partners who are very deep in the local communities, who know the specifics of the environment, as well as the real local dynamics. Practical Farmers of Iowa, for example, know their parts of Iowa very well and they work with farmers as an educator or with an extension service. Or it might be a university or a not-for-profit. For us these are implementer partners. You have to have people who the farmers trust.

With our demo farmers, we’re also working with them to try new things. We have a relationship with a company called N-Drip, for example, using a technique they’ve developed for gravity-powered, low-pressure drip irrigation. It’s a brilliant system. Because you don’t have to have an engine. This is all about how we test and learn, test and learn again.

**How do your incentives for farmers work?**

Cost sharing right now is the biggest mechanism for us because it’s very tangible. It’s very effective and it addresses the immediate need—which is the transition period. We know these practices are ultimately more profitable for farmers because they’ll get the same or higher yields, and they use fewer resources.

We’ve got programs where we pay farmers to implement certain practices on a per acre basis, and we do it on some portion of their acres for several years, so that they see the results on their farm. A farmer told me: “I did it on 40 acres in the first year because that’s what you all paid for—and I saw the results. Then you only paid for 40 acres but I did it on 400 acres.” That’s the kind of thing you’d like to see! So we don’t pay for every acre. We pay for it enough that they can see the benefits—and, alongside that, we’re also providing agronomic and technical advice through our implementer partners.



**“Every farmer will tell you not only that their farm is different, but that different parts of their farms are different,” says Jim Andrew.**

**This represents significant investment: How do you demonstrate the benefits to the business as well?**

First, it’s really hard to separate yourself from the existential piece. People really do understand that: We won’t be able to grow potatoes without doing this—that’s a very real thing. And when you talk to farmers, they tell you this makes sense for them. Then it’s just a question of how we get from here to there.

But you’re right, we’ve got to show how it’s going to benefit the business along the way. That might be in the long term, it might be tomorrow—but if you can’t tie it to the business benefit, you’re not going to get anywhere. That’s why I’m always thinking about how I make the business case, in one way or another. I’m not an environmental engineer. I’m a business guy in this role. I’ve run some of our billion-dollar businesses. I headed up strategy for the company and now I’m in charge of sustainability. So my question is always, how do I translate deep environmental knowledge and jargon into something a business leader can understand?

It’s about harnessing the machinery of the company. I sit on what we call the CapEx [capital expenditures] committee, for example, because there’s a whole process that already exists around that and I feed into it; then I can let them take the work forward. If a new plant has to meet certain sustainability requirements, I don’t have to create a whole new process; I just connect into the existing



capital appropriations process to ensure the new plant meets those requirements. Getting into those core processes is how I harness the machinery of the company; it makes it easier and more effective.

**This is a relatively new issue for most companies and it's hard to even know what to measure. What we hear a lot is there is a lack of data. How do you look at that?**

It's a great question—and a work in progress. We know that if certain practices are implemented, they have a positive impact. So that's one way we can measure: the implementation of practices.

Believe me, I've spent a lot of time on this topic and I think there are two levels: a macro level and a micro level. At the macro level, it's about no deforestation goals and so on. The micro level is about how much carbon has been sequestered in the soil, for example.

We're working on a number of pilots with technology companies on everything from using satellites and drones to measuring soil health. But there are no clear standards on any of these things yet and so we're also working with all the standards-setting bodies.

The media and NGOs often think businesses don't want to have metrics and be held accountable. But we would love a standardized approach to measuring some of these things; it would eliminate a lot of cost and complexity that we have today. What we're looking for are metrics that are practical, that can actually be measured at scale and acceptable costs, and that are highly related to outcomes.

**“If it's only a few companies out there trying to do some of these things, we can't move nearly as fast as we can if we get the whole system going.”**

**How does all this create competitive edge for PepsiCo?**

These topics are far too important and they're far too complex; this is not generally where we should compete. We need the scale of our biggest competitors and they need ours to be able to do this stuff effectively. In these areas where we share common goals, I always say I'll partner with anybody, including my fiercest competitors. And then in the marketplace, we compete—but on these kinds of things, we don't.

Even for a company as big as PepsiCo, we can't do it by ourselves—because farmers don't grow just our crops. They produce for other brands too. They use equipment, they have fertilizer suppliers ... there's a whole set of people who've got to be a part of this equation.

These are ecosystems problems that require systems solutions—so the more companies and the more NGOs and the more governments that we can have pulling in the same direction, the faster we're going to move and the more effectively we're going to be able to marshal support. If it's only a few companies out there trying to do some of these things, we can't move nearly as fast as we can if we get the whole system going.

And, going back to your last question, a good set of standard metrics would help to enable that.

**All this takes a while—but in your view speed is essential. How do you accelerate?**

We find it takes two to four years for farmers to see practical results. So you've got to start now. You can't wake up in 2029 and think it's magically all going to happen. That's why we're out there working really hard to get that fly wheel going—because we know that farmers, when they see it, they want to put those practices into action.

In 2021, we had 345,000 acres of that 7 million goal that were regenerative. This year, we haven't reported the number yet but it's going to be significantly higher. And it needs to be.

**Lots of companies are just now beginning to focus on regenerative farming, what would you say to them?**

Call me. We'd love to work with you. Come along on the journey because we need everybody. ♦

**LUCY PARKER** is a Brunswick Partner and Business & Society Global Lead, based in London.

**BRENDAN RILEY** is a Partner, based in New York, who specializes in working with companies in the consumer goods and retail sectors.

## THE ESSENCE OF



**pep+** puts sustainability at the center of our strategy and all our decision making. So that as we look to grow, we do it with sustainability at the core. That amounts to being a transformation of what we do and how we do it. Our CEO is very clear; this is the future of our company.

When you think about how companies and how society have been built over the last 150 years,

you can see that a lot of the basic assumptions we've had are having to change quite quickly. The hydrocarbon-based economy has improved living standards for billions of people. Yet now the science is very clear, there's challenges caused by the release of all that carbon. Now, we have to consider those things: We have to make them part of our decision making.

When we look to reduce our footprint, carbon emissions are just one element—the same is true for packaging, water, biodiversity and soil. We have to change dramatically in the next 20, 30, 40 years. Moving at scale—and quickly—I think is imperative.

—Jim Andrew, Chief Sustainability Officer & Executive Vice President

**M**ORE THAN A MILLION RHINOS ROAMED Africa and Asia in the 19th century. Today there are only 26,000 left, and three of the five remaining rhino species are classified as “critically endangered.”

The plight of the rhino isn’t unique—one million plant and animal species are at risk of extinction, according to a 2019 UN report. Yet that an animal as large and mighty as the rhinoceros, an almost mythical concoction of horn and armor, is being driven to extinction by human violence and greed somehow conveys the awful urgency of the nature crisis in a way that statistics alone cannot.

South Africa has more rhinos than any other country, making it ground zero in the fight to save them—a struggle that, for the last decade, has included Investec, one of the country’s leading banks and wealth managers.

The rather obvious question: Of all the issues on which it could choose to focus, how did an international bank with more than \$53 billion under management land on rhinos?

“I think having a zebra as our icon immediately puts us into a space where we acknowledge our African roots,” says Tanya dos Santos-Ford, Investec’s Head of Sustainability. “It’s almost that, as the zebra company, we would be expected to do something in the space, but that’s not obviously the full story. The rhino resonated because it’s a symbol for South Africa. We saw it as our responsibility to do something about the poaching crisis. A majority of South Africans have some kind of bush experience at least once a year. We live this stuff.”

The fight to save the rhino carries a feature true of the broader nature crisis: it’s a global issue with distinctly local effects. For businesses looking to make a meaningful difference, the best place to start might be their own backyard.

A criticism of corporate philanthropy is that it tends to care more about generating publicity than impact. To those insinuations Investec can point to their decade-long commitment to the cause and the tangible results of that commitment, from 130 rhinos rescued to education initiatives that have reached more than 50,000 people living in communities along the reserves. What began as a relatively targeted project has since grown to incorporate skills training for local communities, programs to reduce the demand for rhino horn, and cross-sector partnerships to tackle illegal wildlife trade.

In a recent conversation with Brunswick, dos Santos-Ford, a 21-year veteran of Investec, spoke with a fluency and passion for the issue that, if you



# ZEBRA SAVING RHINO

didn’t know her résumé, would suggest she’d spent her career working for a wildlife NGO. “This isn’t just a project for us, some box-ticking, where we dip in and dip out—that’s why it’s gone on for 10 years,” she said. “We feel a responsibility. If we do the right work, we can make a massive difference. We can help save a species.”

## How did Investec get involved in rhino conservation?

In 2012, the rhino poaching crisis in South Africa was particularly extreme. There was a campaign asking

Why is a bank on the frontlines of the fight to save the rhino from extinction? Brunswick’s **GRAEME COETZEE** and **KEVIN HELLIKER** report.





PHOTOGRAPH: STEPHAN TAMMINGA/GETTY IMAGES

businesses to donate money and in return you'd get your logo on a building. That's not how we like to approach a problem: give some money, walk away.

We started our own project: Rhino Lifeline. It was small. We donated a vehicle to a wildlife vet in the Eastern Cape, which enabled him to respond as the rhinos were being poached.

We quickly realized there was much more that needed to be done, and that it was about much more than just saving the rhino. If you're talking about tackling climate change, then you're talking about protecting biodiversity. And rhino are seen



**"Having a zebra as our icon ... puts us in a space where we acknowledge our African roots," says Investec's Head of Sustainability.**

as a keystone\* species. They're critical to the overall ecosystem. You take them out and it has a domino effect on other species.

We also knew local communities situated along the reserves had to be part of the equation, and that education would be key. So we partnered with a project that had been piloted in Botswana and brought it down to the Eastern Cape. It taught kids of a very specific age about the importance of conservation. Because if kids go home and tell their parents to stop smoking, they have a lot more impact than the rest of the world telling them to stop smoking.



Originally, we rolled this program out across communities in the Eastern Cape. And then we shifted our focus to the communities alongside the Kruger National Park in Mpumalanga. It's blossomed since then. We also realized we needed to do more around the actual rescue of the rhino.

### When you say "rescue," are you talking about from poachers?

The majority of the rescued rhino are orphans. Generally, what you see is that a mother has been killed by hunters. If it's easy enough, the poachers will kill the calf and take whatever horn it's got. But usually, the calf runs away. And it's then on its own in the wild, where it won't likely survive; calves generally stay with their mothers for several years before they move on. You do occasionally get one or two older rhino—perhaps the poachers were scared off.

We helped raise funds for the biggest rhino orphanage in South Africa: Care for Wild. They take most of the Kruger Park's orphaned rhino. They've grown from having just a handful of rhino in 2013 to more than 130 now. A really phenomenal project.

### One-hundred thirty sounds like a modest number, but given how decimated the rhino population is, every one really does count.

Exactly. And remember, these are orphans, many of whom would be unlikely to survive. And eight calves have now been born from those orphans.

But, again, it's important to remember that this is bigger than saving rhino—we call it the economy of wildlife. It's about bringing local communities into this. People in these communities often struggle to participate in the economy. So we added a skills-development component to Rhino Lifeline. Because valuable skills in these areas are generally around conservation—checking in on the poaching units, for example, or tourism-related skills, since so many people come to South Africa to see the rhino.

### Your involvement seems to have grown as you've learned more about the issue.

It has. We realized, for instance, there was a lot of great work around the supply side of the poaching crisis, finding ways to prevent the poachers from succeeding. Far less attention was being focused on the demand side. I went to Beijing and Hong Kong to better understand the demand for rhino horn in Asia. It's massive. And until there's a mindset change to influence this whole system of demand, you're going to keep spending lots of money on the supply side.



## THE RHINO as a Keystone

**"A RHINO IS NOT JUST A RHINO: It is a load-bearing strand in an elaborate ecological web. Just by going about its day, a rhinoceros helps keep its whole environment healthy. Its grazing mows and plows the fields. Its daily walks clear paths through the bush, leaving hard, flat roads for other animals to follow. A rhino's dung feeds colonies of insects, and birds come to feed on the insects, and other predators come to catch the birds. A rhino is not just a part of the world—it is a world. Everywhere it goes, it moves in swirling clouds of ox-peckers and egrets and guinea fowl. Humans like to pretend that we can stand apart from such elaborate interconnections, from the vast web of nonhuman life. But we, too, are a part of that web."**

—Sam Anderson,  
"The Last Two Northern White Rhinos On Earth,"  
*New York Times Magazine*.

One of the programs we came up with was to bring young adults from Vietnam to South Africa. They spent a week living in the bush, under the stars, next to a river. It was about trying to connect them with the value of nature more broadly, and the value of the rhino specifically. They were then tasked with raising awareness when they went back to their schools and communities.

In another program we brought Ma Weidu, who founded one of China's first private art museums, and his team out to South Africa to go to a game reserve, not only to see the animals in the wild but also really get to know these massive animals. They put their hand in a rhino's mouth, felt how velvety soft—

### Is that safe [laughs]?

It was during a routine procedure for the rhino, where the rhino was sedated. So everyone was safe.

## "A REPRODUCTIVE HAIL MARY"



The two species of rhino found in Africa—the black rhino and the white rhino—are, confusingly, both gray. White rhinos earned their name from the Afrikaans "weit," or "wide," referring to their square mouth. Thought to be extinct at the turn of the 20th century, the white rhino has made an impressive comeback. Yet one of its subspecies is functionally extinct. There are only two northern white rhinos left on earth: Najin and her daughter Fatu, both of whom are unable to carry a pregnancy.

Najin and Fatu live

on a conservancy in Kenya, where they are protected by armed guards 24 hours a day. Conservationists have harvested eggs from both rhinos, and used those eggs to create embryos which are preserved in liquid nitrogen. The hope is to one day implant those embryos in southern white rhinos—"a reproductive hail Mary," as *The New York Times* described it, but "also the best option left." In our lifetime we will certainly witness the extinction of the northern white rhino—and, if we are lucky, also its resurrection.



Because you're right, you wouldn't ordinarily do that to a rhino. They can be aggressive.

But having key influencers share that experience with the rhino ... I think you come away struggling to comprehend why anyone would want to butcher a rhino, for the sake of medicine that isn't actually medicine. You realize that even though they're so massive and they've got these beautiful horns, they are so vulnerable.

### Do you have hope?

I have hope when I see how we keep finding new ways and new solutions. And in 2022, the first babies of the orphans were born in a protected area. That certainly gives me hope.

**GRAEME COETZEE** is a Director in Brunswick's Johannesburg office.

**KEVIN HELLIKER**, a Partner, is a Pulitzer Prize winner and Editor of the *Brunswick Review*.



Workers on a farm remove a rhino's horns in an effort to discourage poachers from killing the animals.

## THE RHINO CRISIS: A SNAPSHOT

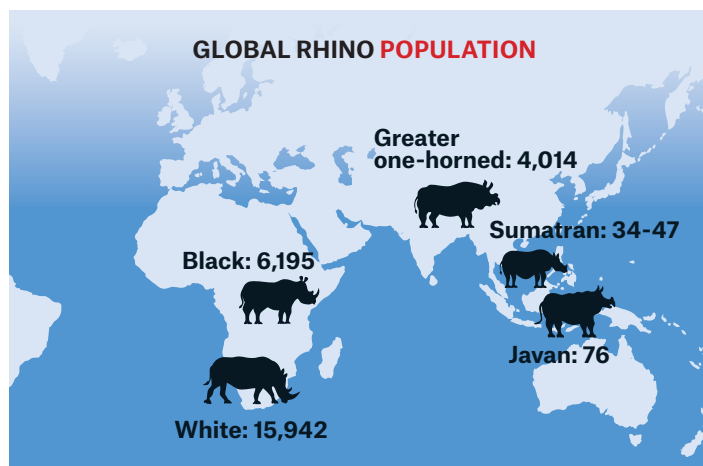
**3** forces are largely driving the extinction of rhinos: hunting, habitat loss and poaching.

International trade in rhino horns has been illegal since 1977, yet there continues to be demand for it, particularly in Vietnam and China. Made of the same protein found in human hair and fingernails, rhino horn is a prized ingredient in traditional medicine despite there being no evidence it confers any medicinal benefit. At its peak, rhino horn sold for \$65,000/kilogram,

costlier than gold or cocaine.

There remains debate on how best to protect the rhinos. Even the most widely discussed options remain controversial: legalizing horn trade, de-horning rhinos and using trophy hunting to fund further conservation.

Thanks to decades of sustained conservation efforts, some rhinos are making a comeback, particularly the southern white rhino. Between 2009 and 2019, the total population of rhinos worldwide grew by more than 6,000.

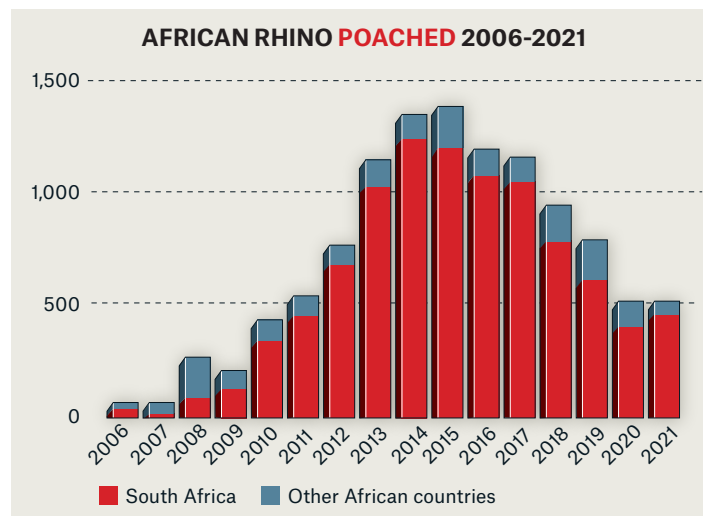


### WEIGHT OF SEIZED RHINO HORNS, 2009-2018

An average horn weighs approximately 1 to 3 kilograms.

WORLD	11,281 KG
SOUTH AFRICA	2,994
VIETNAM	1,757
CHINA	1,715
MOZAMBIQUE	1,031
KENYA	469
MALAYSIA	430

Source: African and Asian Rhino Specialist Groups (AfrSG) & TRAFFIC



Source: Save the Rhino International

**A**S A PIONEER OF THE CABLE TELEVISION industry, billionaire John Malone earned a reputation as a hard-headed deal maker—the so-called Cable Cowboy.

But there's a lesser-known Malone who could be called the Cowboy Conservationist. A former board member of the Nature Conservancy, he still works with that organization and is involved in collaborative projects with the Land Institute and other groups to improve agricultural sustainability. "I have a little green in me," says Malone.

He is the largest landowner in America, holding title to 2.2 million acres in Colorado, Florida, Maine, Maryland, Nebraska and New Mexico. His ownership and management of that land is all about preservation. It's a strategy he started putting in place decades ago, when development began to alter the face of the West. As Malone built his Colorado-based national cable empire, he and his wife needed no scientific reports to alert them to the threat to nature.

"You don't realize what a precious commodity



America's largest landowner tries to balance carbon, cattle and people.

# Malone Conservationist

land is until you see it disappear in front of your eyes. When Leslie and I first moved to Denver 50 years ago, we fell in love with the vistas of the Rockies, the clean air and the freedom of the West. Three times we moved because we felt the city encroaching on us."

Malone's view of a preserved Earth is a productive Earth, one that produces crops and livestock in a way that's profitable, sustainable and protective of the elements. Protective of something else, too: "The culture of the West," says Malone.

Besides conscientious management, he's invested in research toward finding high-tech, high-yield, low-impact ways of farming and ranching, and toward reducing carbon overall. He's investing in technology such as GPS cattle collars for "fenceless grazing," experimental new species of perennial wheat grass, carbon-capturing techniques that leave the land healthier, the soil rich with native flora and fauna.

One dramatic effect of the Malone preservation strategy is visible on the 70-mile drive between Denver and Colorado Springs. Concerned that one of the most beautiful drives in the West was giving way to strip malls and developments as the suburbs of those cities grew toward each other, the Malones



LEADER PROFILE

JOHN MALONE





bought the Greenland Ranch, the only natural buffer affording uninterrupted views of the snow-capped Front Range of the Rockies to the West. Working with state and local groups, the 21,000-acre open space, supplemented by adjacent land-owners, is now in a conservation easement, and can never be developed.

Often Malone parleys his land purchases in coordination with others, and sometimes the Malones simply save a beautiful spot in the line of a developer's bulldozer. In 2007, for example, a 600-acre thoroughbred farm in Maryland that was on track to becoming a residential development was purchased by the Malones and put in a conservation easement. Today Riveredge Farm is a world-class sport-horse training facility used by the US Equestrian Federation, among others.

Malone first took to ranching soon after he moved to Denver in 1973 as an Ivy-League educated 31-year-old, trained at Bell Labs, to help a nearly bankrupt cotton-seed broker, Bob Magness, run a cable company called Tele-Communications, Inc. Under Malone, TCI would become the largest cable operator in the US.

For decades, TCI owned Cow Creek Ranch, a 22,000-acre spread due north of the Colorado border in Wyoming, a working cattle ranch that doubled as a destination for meetings with TCI's biggest investors. When Magness passed, and TCI was sold to AT&T for \$48 billion, Malone bought the land.

He continued to accumulate more land "mostly just to save it" and by 2011, he surpassed his fellow billionaire friend and cable-TV pioneer Ted Turner, who had held the title for the previous 15 years and is now the fourth largest individual landowner in the US.

At 82, Malone remains the sagacious chairman of Liberty Media, which has controlling investments in Discovery Warner Brothers, SiriusXM, Formula One racing, the Atlanta Braves baseball team and Liberty Global, one of the largest providers of phone, internet and TV service in the world.

As the owner of the fourth-largest cattle operation in the West—his lands also produce timber—Malone is well aware that some environmental leaders believe that preserved land should be free of man, cattle and sheep. Malone disagrees, pointing out for starters that about 50 million buffalo grazed on the America that Europeans "discovered."

Globally, livestock contributes around 15% of greenhouse gases according to a recent UN report. Malone points out that livestock producers "are doing a reasonable job right now satisfying the

Globally,  
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UN report.

**To become the nation's largest landowner, Malone surpassed his fellow cable cowboy Ted Turner. Both cable titans remain committed to preserving their titanic ownership of the American West.**

needs of 8 billion people on the planet. If you're going to start changing these systems for some longer-term, more sustainable goals, we have to think it all through. You can't just say, let's throw a switch."

A big challenge Malone and other large ranchers face is overgrazing, which contributes heavily to erosion and carbon consumption. One solution Malone has experimented with at his 70,000-acre Red Top ranch in southeastern Colorado involves global positioning satellites and high-tech cow collars. Much like an "invisible fence" used by pet owners, the cows are given audible warnings, and a tiny, tingly charge if necessary, when they approach a border of the virtual pen created by the rancher, whose coordinates are locked into GPS satellites 12,000 miles overhead in space.

With this technology, ranchers can essentially rotate grazing areas without the need to drive the cattle or use fencing. Working with the Nature Conservancy and Colorado State University, along with other groups, the goal of Malone's team is to help researchers better understand why cattle make the choices they do about where they graze. Knowing this, ranchers can either suppress or enhance what's growing. "It's another tool," said Malone.

In Ireland, where he owns a horse farm, "twice a year we bring in dense flocks of sheep, and they eat everything down to the ground, and that aids the native grasses. It turns out, the horses are very selective in what they graze. They'll eat the grasses



PHOTOGRAPH: RUETERS PHOTOGRAPHER/RUTERS/REDUX



they like and avoid the plants they don't like. The sheep will come in and eat everything. And if everything gets eaten down to ground zero, it aids in the regrowth. Otherwise, only the undesirable or noxious or invasive weed becomes dominant with no competition from the natural grass."

He has studied the holistic grazing techniques advanced by Allan Savory, who has generated attention, and some controversy, with his non-intuitive theories that increasing livestock grazing can improve rangeland health and actually help reverse climate change.

At Malone's Silver Spur Ranches, in Wyoming, New Mexico, Colorado and Nebraska, it's a constant effort for ranch manager Thad York to ensure sustainable grazing, protect healthy native grasses and prevent erosion. "We're trying to optimize productivity and sustainability," said Malone, a challenge in dry, arid country dotted with sagebrush.

So Malone has leaned on the Land Institute, which is gaining traction in the field of perennial agriculture. With plant breeders and ecologists in partnerships around the globe, the group is creating diverse, perennial, regenerative agriculture at scale that mimics natural systems.

Unlike annual crops, perennials don't require reseeding every year, plowing, mechanical weeding or herbicides to flourish, all of which prevents soil erosion, improves the structure of the topsoil and sequesters carbon.

"Perennial grains can grow deep roots," says Malone, sounding every bit like the professor he could have been. "They're capturing carbon from the atmosphere, and creating organic compounds that are going deep into the soils. The depths of the roots protect them from drought. And if you can get it to take, the cost of production in the long run should be much lower."

Since grains make up over 70% of global croplands, transitioning to a perennial model is one solution that could help spread sustainable, regenerative crops globally.

After 40 years of testing, the institute recently introduced its first commercial grain, trademarked Kernza, a "domesticated wild grass—intermediate wheatgrass—that has a long, slender head that resembles wheat seeds." Described as sweet and nutty, it is now being made into a cereal and beer, and it touts "superior grazing performance" because the herd can graze it like winter wheat, and the grainless stalks can still serve as fodder for livestock.

Malone is but one landowner in the global

Since  
grains make  
up over  
**70**  
percent of  
global  
croplands,  
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ing to a  
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that could  
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tive crops  
globally.

cooperative effort on perennials trying to figure out how to produce more food with fewer chemicals and less damage to the environment. The institute is also experimenting with perennial rice, sorghum and legumes.

Atop the peaks of the forests of Malone's land in Maine, dozens of windmills generate electricity, built by a wind farm that leases the land in exchange for which Malone gets a percentage of revenue from the sale of electricity.

"Ted and I have had this debate, too, about solar or wind energy—what's the best use of your land? I believe its worth exploring what resources a landowner should be willing to see exploited—within reason—to help sustain and improve it."

Turner's view was more "primitive" said Malone, and on one of his larger ranches in Montana, "he's taken every sign of human habitation and stripped it off."

"I'm not as pre-Columbian as Ted is in his view of land ownership. I'm trying to figure out how to enhance the productivity of farm and ranch land, for multiple purposes, including the sequestration of carbon from the atmosphere, which is important to me."

Malone also grows trees in Maine to cut them down—and then replant strategically to grow more—because in his eyes it's a form of sustainable, long-term agriculture with a "crop" useful to humans. Healthy forests reduce greenhouse gases by absorbing carbon dioxide, which remains stored even in products made from wood. The US timber industry has been considered a sustainable, renewable resource for years. Roughly 80% of US hardwood forest land is controlled by private landowners; in the last 50 years hardwood forest acreage in the United States has increased by 18%.

"I'd like to see this done in a way in which the land, because of our care, can produce more of whatever it does year in and year out without degrading the environment. So in a forest, we're taking steps to make sure there's more diversity to support wildlife rising over time." Meanwhile, in an old Maine tradition, he has largely kept the land open for public sports and hunting.

Malone is convinced that being a good steward of the land is among the noblest of pursuits. "The environment that we say grace over needs to be managed in a way that is productive, sustainable and enhanced over time," he said. ♦

**MARK ROBICHAUX** is a former *Wall Street Journal* reporter and author of *Cable Cowboy*, a book about John Malone and the rise of the cable-TV business.



LEADER PROFILE

MARK SCHNEIDER

In an excerpt from Jon Miller and Lucy Parker's book *The Activist Leader*, the **CEO of NESTLÉ** explains why leading the transition to regenerative agriculture this decade is key to reaching net zero, and the long-term resilience of his company.





# mark schmeider

The climate and nature crises are making it harder to feed a growing planet.

At the same time, unsustainable food systems are worsening the problem, creating a vicious cycle. It's clear we must move to a better way of nourishing our growing planet, equitably, affordably and sustainably. • That puts the food and agricultural industry on the front line, with a unique and out-sized role to play. The good news is that companies like Nestlé, one of the world's largest food businesses, with a value chain that spans 187 countries and encompasses 500,000 farmers, are stepping up to the challenge. They see a huge opportunity to accelerate the shift to regenerative farming in this decade. • This means working with farmers to help them protect and restore our nature and climate as well as growing food. This transition in the way we produce food will be just as significant as the energy transition for reaching net zero, while also delivering mutually reinforcing positive impacts for nature and people. • Nestlé is planning to source half of its key ingredients from farms where agricultural practices enrich the soil, replenish natural water cycles and soak up carbon by 2030. With a focus on regeneration throughout its entire supply chain, the company will also support local communities to preserve forests and restore ecosystems.

## “Our industry stands for a quarter of all emissions—and we are the largest food company—so this is our calling.”

Meanwhile, as a leading consumer-facing business, Nestlé aims to drive up demand for sustainable, nutritious diets—so it is reformulating products and rapidly expanding the portfolio of plant-based choices. Working with farmers to rethink every dimension of their ingredients, including dairy, Nestlé intends to grow more, better food to provide healthier diets for a growing population while accelerating the transition to become net zero and nature positive.

The company believes that the resilience and success of their business depends on this transition. And to achieve his goals, Mark Schneider, Nestlé’s CEO, is clear that he needs to make farmers’ needs and aspirations a top priority. What follows is an extract from *The Activist Leader*, in which Schneider shared with authors Lucy Parker and Jon Miller his perspective on why he has set his company on a path to net zero, with regenerative agriculture at the center of his roadmap.

**M**ARK SCHNEIDER, CEO OF NESTLÉ, DOESN’T IMMEDIATELY strike you as an activist. He has the perfect pedigree to run the giant Swiss-based multinational, the largest food company in the world: born in Germany, MBA at Harvard Business School, a PhD from the University of St. Gallen, multilingual, and with impressive CFO credentials. We were keen to speak to Schneider because Nestlé has a track record of taking on issues like human rights, water use and deforestation. So, we asked him: when it comes to issues like this, are you an activist? He told us:

‘Activist; yes. A zealot; no. It’s important to make it an active part of your agenda, but you need to know where to draw the line. We’re not a charity. We’re not an NGO. This is not philanthropy. If you’re leading an organisation that has a vast footprint, you can be a part of either blocking or moving trends in your industry—and with that comes a responsibility to society.’

The key point for him is how you decide to leverage the scale of the business to drive change: ‘We aren’t a corner shop; we’re a multinational company, publicly quoted and a big part of society. Such status doesn’t suit a narrow type of leader,’ explains Schneider. That sensibility is built into the qualities he looks for in the individuals in his leadership team:

‘If you choose to be an executive at a company our size, one of the criteria we insist on is the ability to helicopter up and down: someone who can give you context but is also very willing to drill down into the details with you. If you’re just sky-high at the 10,000-foot level, you don’t get traction on the details. But if you’re not able to rise above and see how that all links to the wider ecosystem around you in the world, then you’re also not in the right place as a leader of this organisation.’

Nestlé works across a wide range of societal issues, but they’ve made climate change and regeneration a key priority. For Schneider and his entire executive team, that’s where the scale of the company and the scale of the issue intersect:

‘You have to pick your battles; you have to pick your priorities. There are lots of other things you could do, of course. But you can’t lead the charge on all of them, at the end of the day, you’re unlikely to get the traction you need.’

‘Climate change to me is the biggest and most defining issue of our time. It’s getting awfully warm on this planet. If we don’t address that, many of our lesser problems may not actually count that much. That’s where I, personally, and my colleagues are on this: we all feel that given the impact of agriculture and food on the climate, we have to make a contribution. Our industry stands for a quarter of all emissions—and we are the largest food company—so this is our calling.’

That for him is the big picture—the helicopter view—of the climate challenge. Drilling down into the detail, he took himself out into the fields to meet the farmers. What he saw gave him conviction that this is doable. ‘Not much happens fast in agriculture,’ he laughed, ‘but when you compare these fields side by side, one traditionally farmed, the other with regenerative methods, after a few years, you already see a difference.’ However, the revelation for him was what making this transition asks of the farmers themselves:

‘On a personal note, the part that really blew me away was that the farmers I met all had a similar story to tell. It took three or four years of increased investment and reduced yield before finally these new methods got traction; they had almost had to give up. So, there’s a valley of tears.’

It was a big insight for Schneider: these were farmers in Switzerland, one of the richest countries in the world; if they were experiencing such challenges, how much tougher it must be for farmers in many other places. And yet Nestlé’s ambitions on climate depend on farmers adopting these new techniques:

‘What became clear to me is: we as the buyer from these farmers, we have to actively help them because, otherwise, these people will not be able to make this transition. They’re the most exposed in this supply chain. It’s not enough for us just to insist that this has to be done. We have to help them with technical assistance, the premiums that we pay and sometimes financial assistance, to make it through that valley of tears.’

At their AGM in 2021, Schneider announced a €3.6 billion investment over five years to tackle climate change and regenerative farming.

‘Nestlé is really showing us a glimpse of how future business is going to be approached,’ commented a GlobalData analyst: ‘Other companies should take note.’ The message coming from Schneider is if you’re serious that you want this to happen, you need to get serious about what it takes to deliver on it. ♦



# REIMAGINING FOOD SYSTEMS

**T**HE WAY WE PRODUCE AND DISTRIBUTE FOOD is beset with inefficient and unsustainable practices that damage our planet and, indeed, our health. It is a systemic problem that requires a broad reconsideration of the goals of the production of goods throughout the value chain and beyond. Governmental structures, clothing, construction, marketing, fashion, health and cultural and social behaviors all need to be part of the conversation.

As Global Executive Director of the Food and Land Use Coalition, or FOLU, for the World Resources Institute, Morgan Gillespy oversees strategies to meet Paris Agreement goals. FOLU consists of nine global institutions, each with its own organizational strategy and drivers, that work with governments, NGOs, financial institutions and business to transform food and land use systems. Prior to her current role, Gillespy was Global Director of Forests at CDP, where she supported companies in their efforts to track and measure impacts on deforestation.

## How do you define the food system?

At FOLU, we talk about a “food and land use system.” These systems are totally linked; we can’t talk about food without thinking about where it comes from. So the term food and land use system covers every factor in the way that land is used and food is produced, how it’s stored, how it’s packed, processed, traded, distributed, marketed. And then how we consume it and potentially dispose of it.

This touches on the social: How do we feel about food? How do we celebrate with food? What are our customs as they relate to food? And it touches on economics: Can we afford to buy the food? And the environmental: What about the emissions or pollution produced? We also want to recognize and appreciate that agriculture is used for non-food purposes—bio energy, for example, or wood or cotton. Those are agricultural uses that are not necessarily for food. So food and land use systems covers the whole remit, from production, distribution,

Brunswick’s **PHIL DREW** and **TARINI KUMAR** talk to **MORGAN GILLESPIE**, Executive Director of the Food and Land Use Coalition at the World Resources Institute, about an end-to-end systemic transition.

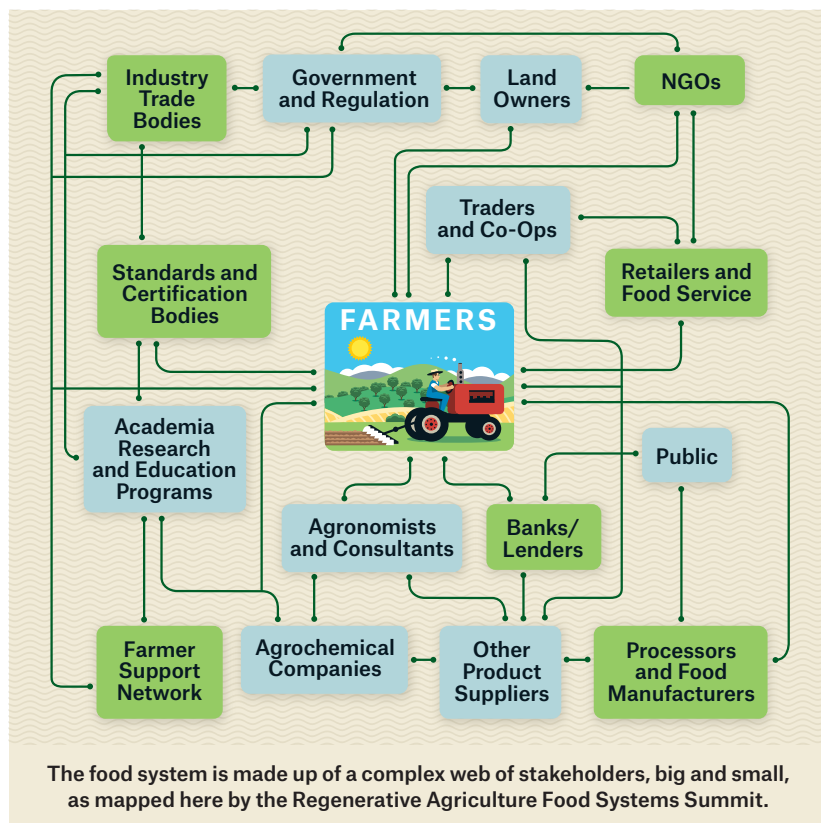
to consumption of food and inclusive of non-food productive agriculture uses.

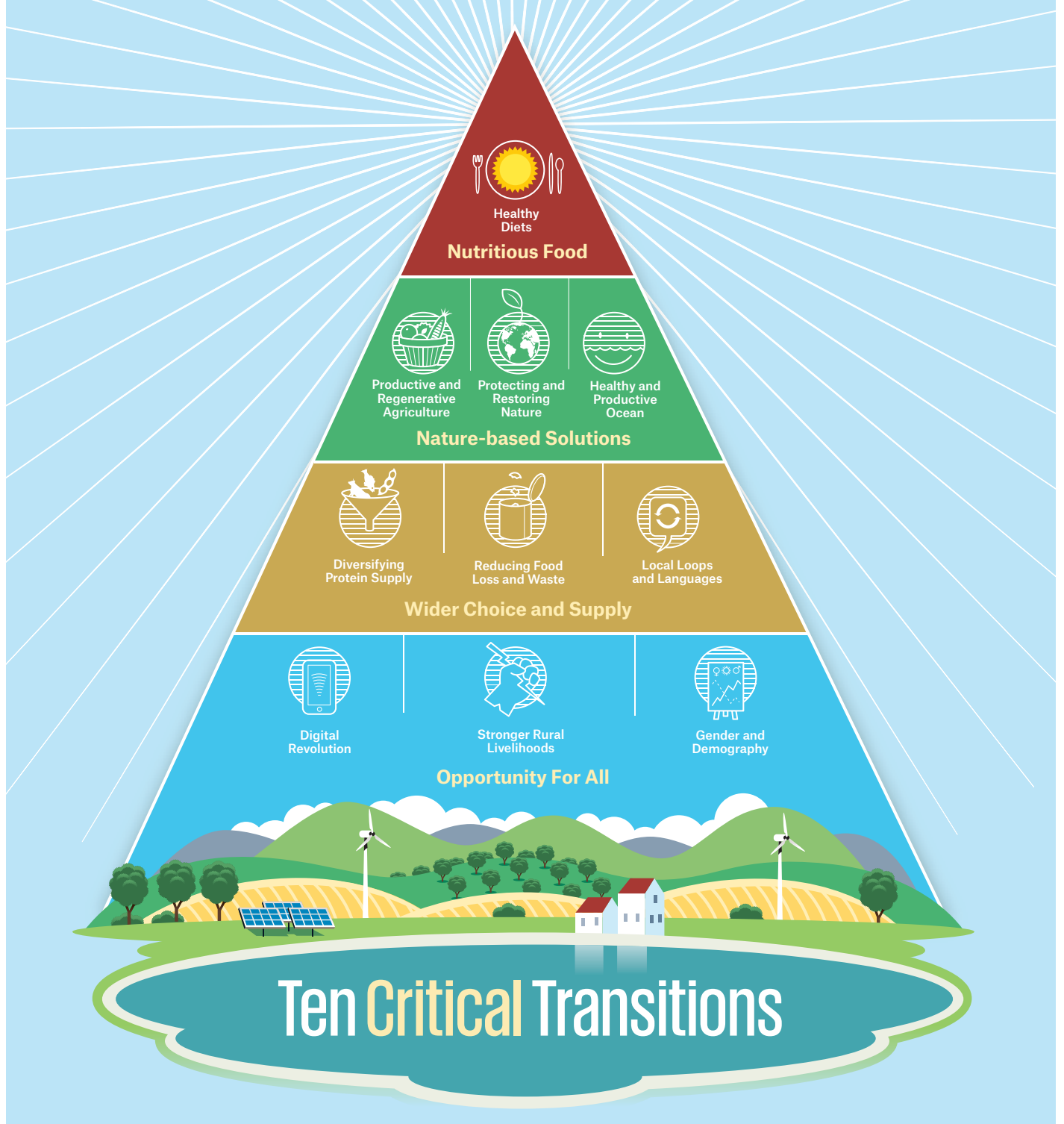
## Why is a transformation needed by 2030?

FOLU published a report in 2019 called “Growing Better” that articulates the economic necessity for transforming food systems. Our food and land use systems currently cost \$12 trillion per year in damage to people and planet. Health costs are about \$7 trillion, environment is about \$3 trillion, and economic losses are about \$2 trillion. These systems are not serving the purposes that they were built for. We are not successfully feeding the world in sustainable, equitable or nutritious ways. If we do nothing to change the system, these costs will rise to \$16 trillion per year by 2050.

Some 2 billion people don’t have regular access to sufficient safe and nutritious food. Since COVID the number of malnourished and food insecure are increasing dramatically. Linked to that, a third of all food produced globally is either lost or wasted. We’re overproducing food on the one hand and throwing it away on the other. From an environmental perspective, our food and land use systems are also responsible for about 30% of global greenhouse gas emissions, contributing to climate change that is hurting agriculture.

So we need to transform food systems to fix the economics, human health and the environment.





**T**HE FOOD AND LAND USE COALITION'S PYRAMID OUTLINES how 10 critical transitions are necessary for the sustainable production of food and use of land. • At the top of the pyramid is affordable, healthy diet for all—predominantly plant-based, with more fruits, vegetables and whole grains, diverse protein sources and reduced sugar, salt and highly processed foods. This requires businesses to realign goals and standards, but by 2030 represents a potential \$2 trillion business opportunity. • Nature-based solutions are the second tier, including: better agricultural systems toward productive and regenerative farming; protection and restoration of nature, requiring a massive investment to return approximately 300 million hectares of tropical forests to health by 2030; better fishing and aquaculture to deliver increased supply of ocean proteins, restoring coastal and marine habits, and curbing nutrient and plastic pollution. Combined, the actions in this tier represent over \$1 trillion in business opportunity. • The third tier is made up of transitions that expand

consumer choice and supply. Rapid development of diversified sources of protein would complement the global transition to healthy diets, expected to account for well over 10% of the protein market by 2030; reducing food waste by 25% would lead to significant benefits for society and the environment; and towns and cities—representing 80% of food projected to be consumed by 2050—need more sustainable food economies. • Finally, the pyramid's foundation puts opportunity for all at the heart of the transformation. Digitization empowers people rather than concentrates data; investment made in the talent, infrastructure and social systems can aid a rural renaissance; and supporting women to make choices that are better for themselves, their families and communities, can unleash the true potential of all people-driven solutions and accelerate a demographic transition to a replacement rate of fertility in all countries, adding an estimated \$195 billion to the global economy. For more information, read the FOLU 2019 report "Growing Better: Ten Critical Transitions to Transform Food and Land Use."



### What is the vision for a positive outcome?

In that report, we outline 10 critical transitions, articulated in terms of kind of an apex of a pyramid. At the top are healthy and nutritious diets. We really believe people need to be put first, both people consuming food, but also people producing the food. It also means people can afford the food that they need to buy and have access to fresh fruits and vegetables, to an increasingly plant-based diet, but where they need access to dairy or meat products, they have it.

Right now, our agricultural systems tend to be extractive. We take nutrients out, pollute the water and the earth with fertilizer or chemicals. Overwatering in some areas, or not managing soil quality so it can absorb water. And we're not leveraging agriculture for its emissions reduction capabilities.

We want to flip that on its head. We want to have regenerative productive systems, where we're increasing biodiversity, increasing the quality and the quantity of our fresh-water supplies, reducing the chemical input. Emissions are really an important piece of the puzzle, as climate change causes climatic disasters for agriculture. Food loss and food waste alone contribute 8% of GHGs in the world.

Access to healthy diets; a regenerative system that is still producing high yields, so enough food to feed the world; a protection and restoring of nature; and perhaps halving food loss and food waste by 2030—that's the vision that we're seeking to deliver.

### How did you arrive at a systems-level view?

Our societal structures are pretty siloed. You see that across the board. Governments have a ministry of health and a ministry of agriculture. And those two don't necessarily talk to each other. "Are we growing nutritionally dense crops? Are we growing the food that we need to make sure people are healthy?" Weirdly, they don't have those conversations.

Even with NGOs—we have a climate team, a forest team, a water team. Everyone gets so specific about their content knowledge area that you forget to take a step back and look at the bigger picture, and how these things are interlinked.

If you want to deal with access to food, you have to think about transport and energy. You have to look at it in an integrated way, in a systemic way. Doing that, you could unlock these triple wins on the economics, health and environment.

### How do you define regenerative agriculture?

What we've been advocating for is to focus on outcomes. And that's really simple. We want greenhouse gas mitigation, improved fresh-water security,



**"You have to look at it in an integrated way, in a systemic way. Doing that, you could unlock these triple wins on the economics, health and environment."**

**PHIL DREW** is a Partner and **TARINI KUMAR** is a Director. Both are based in London and are part of Brunswick's Business & Society team.

increased biodiversity, improved soil health and soil functionality. If we can focus on those outcomes, we don't necessarily need to argue about what the definition is. We can't expect a commercial farmer in Iowa in America to deploy the same farming practices as a smallholder farmer in West Papua in Indonesia.

It's absolutely critical that we take a farmer-centric approach to this, so that they're building resilience for their own farms. What are their current practices? How are they looking to shift their practices? What data, research, knowledge, technical skills or financial resources might they need?

A question that's not often talked about: Do corporates have a responsibility to try to generate demand for regenerative products? The global advertising spend of a fast-moving consumer goods company can be in the billions. Companies say they don't have demand for sustainable products. Well, how much of your advertising spend are you utilizing to promote them?

### Where are you seeing momentum?

Ten years ago, trying to talk to businesses and investors about climate change was hard work. I've had the conversation about fresh-water security over 10 years and they often didn't get it. And now they do. Same with halting deforestation. Now I'm having conversations with them about why they need to deal with food systems as an integrated holistic mechanism that will enable them to deliver on their climate objectives, water objectives, deforestation objectives. And they get it. "Oh, wow. I can deal with everything at once. Food is the entry point into these interrelated poly-crises." So that's really powerful. That momentum is what is giving me hope.

### What first steps should companies take that are just starting on this journey?

Just get involved. The first step is look into it. Understand what your business is, what the risks potentially are to your business—from an environmental, a physical, a regulatory or reputational perspective. What are the opportunities for your business to address those risks? What would a transition plan to a food systems approach look like?

Don't be afraid to ask for help. There are a whole bunch of NGOs geared up to hold businesses' hands and take them through this process: setting a science-based target, joining We Mean Business or the World Business Council for Sustainable Development, one of the coalition partners within FOLU. There is oodles of help out there. So just get started. That's the message. Don't wait. Do something. ♦

By Peter Harrison, Group CEO of Schroders

**A**S THE DUST SETTLES ON THE NEW GLOBAL Biodiversity Framework, there are inevitable and important questions about whether the agreement has gone far enough in parts. But for policymakers at COP15 in Montreal, for investors in business centers around the globe and for the wider community of NGOs, companies, indigenous leaders and youth voices, one thing is clear: Change is here.

There are several implications for the financial community. First, finance has a critical role to play in directing capital away from activities that destroy nature and toward sustainable production and nature-positive supply chains. Second, we are way off meeting the funding needed to safeguard the natural world that underpins our economy and society.

Current estimates point to an annual ~\$700 billion funding gap between what we spend to protect nature every year and what we need to be spending. The direction of travel is undeniable—more public and private finance must be mobilized, in a way that's fair and effective, in order to close the finance gap.

### The role of **ASSET MANAGEMENT**

For asset managers, this is squarely a question of fiduciary duty. Investing in nature can yield both returns and impact—and failing to take account of nature risk is a financial risk for companies and their investors. Alongside direct risks and impacts, preserving and restoring nature can also make a powerful contribution to efforts to mitigate climate change. There is a social dimension, too: Unless efforts to protect nature create positive social

# Natural CAPITAL

impacts for local citizens and indigenous communities, they won't be sustainable.

As a leading active investment manager, Schroders has an important role to play. We make careful and deliberate decisions every day on behalf of savers and investors around the world, because these decisions may affect the financial future of our clients and impact the wider world. We also know the appetite from investors is already there. Schroders' Global Investor Survey released in November 2022 saw that

Revaluing nature can create both positive environmental impact and financial returns, writes Schroders CEO **PETER HARRISON.**

63% of investors want fund managers to focus on natural capital and biodiversity engagement with companies—higher even than climate at 59%.

That's why we have set out our ambition on nature. We want to harness the power of investment to accelerate a nature-positive future, because we believe it has the potential to drive better investment returns for our clients over time.

This requires a united approach right across our business, just as we do with our science-based targets







PHOTOGRAPH: COURTESY OF SCHRODERS

At COP15,  
the message  
was clear:  
There is no  
need to wait  
for the  
complete  
picture  
to start  
responding  
to nature  
risks and  
opportunities. The  
tools are at  
hand to get  
started.

on climate. That includes embedding our approach through the investment insights we develop, the influence we can have on companies and offering innovative financial solutions to our clients. We published our first Plan for Nature last year to demonstrate this ambition, making clear our approach, our progress to date and our future priorities.

Across each of these areas, as well as through our corporate and operational commitments, we believe we can make a powerful contribution to collective

efforts to protect and restore nature, mitigate climate change and deliver positive social outcomes for local communities.

### **INSIGHTS: developing our understanding and analysis of nature-related risks and impacts**

Investors, regulators and NGOs are all pointing to the same issue: we don't currently have sufficiently robust or comprehensive data and tools to measure our impact on nature as precisely as we would like. In 2021, we invested in NatCap Research, partnering with them to better measure, report on and improve the natural capital impacts of our investments. NatCap Research has developed a global natural capital mapping tool, NatCap Map, that measures the current value based on its benefits, shows how to enhance natural capital to maximize value and provides reporting to track progress. We're now looking to work with them on a new platform to measure, report and improve natural capital impacts of our investments in forestry, agriculture and real estate.

Investments like these help us develop the tools and models that provide our investors with insights into chosen metrics around nature risk, alongside more established ESG markers, like carbon and social indicators. For example, proprietary tools like our deforestation scorecard measure companies' forest-related risk exposure and management. The aim is a greater understanding of how company action can be improved, and then working alongside management teams via our active engagement strategy.

The challenge today is scaling this work to deliver a material impact across our portfolios. We are committed to sharing our learnings through client education and external stakeholder and policy engagement, to build collective expertise on natural capital as an asset class and put what we learn into practice.

### **ENGAGING AND INFLUENCING: reducing exposure to nature risk**

As an active asset manager, these insights play directly into how we influence the many companies whose operations and value chains impact, or are dependent on, nature. With hundreds of experienced and insightful analysts and fund managers around the world, we have a distinct opportunity to engage constructively with management teams and support them to transform their business models to a more sustainable footing.

At the heart of this role is the Schroders Engagement Blueprint, which places biodiversity and natural capital as one of six priority engagement themes

in our approach to active ownership. Since 2018, we have engaged more than 200 companies on the topic, helping them understand nature-related risks and opportunities, and the need to take action.

Take deforestation, for example. As a signatory of the Financial Sector Commitment Letter on Eliminating Commodity-driven Deforestation, we joined world leaders and leading financial institutions at COP26 in committing to eliminate agricultural commodity-driven deforestation by 2025. We have since implemented our internal deforestation scorecard to engage 20 priority companies and we are rolling out a targeted engagement program for a wider set of companies. As a result of our actions, Schroders topped the list of financial institutions in this year's Global Canopy Forest 500 report, which ranks the performance of the companies and financial institutions with the greatest exposure to deforestation risk. We will continue to develop our understanding and evolve our approach to engagement to ensure we are pushing for change in the right areas.

#### **INVESTMENT SOLUTIONS: protecting and restoring nature, delivering long-term returns**

To meet demand for investment solutions that will reduce negative impacts on our natural ecosystems, we also need new investment vehicles that directly fund companies or projects with the potential to positively protect and restore nature.

New nature-based investment products should help support a consistent pipeline of good quality, credible projects for investment and the partnerships needed to source and deliver them. This is an opportunity on a mammoth scale—current estimates suggest nature could account for more than 30% of the action needed to avoid the worst effects of climate change, yet natural climate solutions currently receive less than 3% of all global climate finance, according to Conservation International.

Last year, we launched Akaria Natural Capital, in partnership with Conservation International, as one of the first dedicated natural capital impact investment managers in Singapore. Akaria Natural Capital will initially deploy capital toward 15 to 20 high-quality natural climate solutions projects across Southeast Asia over five years.

To scale new investment solutions like these, we must work alongside industry peers via initiatives such as the Natural Capital Investment Alliance (NCIA) to help build the infrastructure that will enable the mobilization of billions more dollars of capital into the places that need it most.

Since 2018,  
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**PETER HARRISON** is Group CEO of Schroders, where he started his career in 1988. He also worked for JP Morgan and other financial firms before returning to Schroders in 2013. He became CEO in 2016.

New investment products like nature-based solutions must also deliver positive social outcomes for local people and communities to be seen as attractive, sustainable investment opportunities. We've become a founding member of the Just Transition Finance Challenge to rally more public and private capital into investments that support a just transition to net zero. And we have developed an internal toolkit, being used by investment managers, that focuses on how to engage with companies that operate in high-risk or conflict-affected areas, to assess their approach to human rights.

#### **A FUTURE AGENDA for the asset management industry**

Across each of the areas outlined above, there are at least three major shifts that need to take place if we are to make a meaningful difference to the funding gap that currently exists to halt and reverse nature loss.

First, as we have seen via efforts to tackle climate change, the nature transition will require the entirety of a business to pivot to address the full suite of ways in which nature affects its risks and impacts. Coalitions like the Taskforce on Nature-related Financial Disclosures and the Science Based Targets Network will accelerate this process, as will the adoption of mandatory nature-related disclosure by 2030, as agreed at COP15.

Second, taking no-regrets action today, and sharing what we learn. At COP15, the message was clear: There is no need to wait for the complete picture to start responding to nature risks and opportunities. The tools are in-hand to get started, so we can start to make progress where we can, enabling us to consult in a more informed capacity on new frameworks for disclosure as they're developed.

Third, aligning on policy. We need rapid and deep alignment on policy and on incentives (and disincentives), as we're increasingly seeing on climate change. Policy alignment is important because it ensures that countries that are home to our planet's biodiversity resources are able to monetize their value efficiently, and in turn preserve them. This is especially true in the context of deforestation, where incentive structures must enable the right compensation to shift away from highly profitable industries that harm the planet's ecosystems.

By making these shifts, we can help accelerate the development of a financial infrastructure able to scale the role of asset managers, and contribute to a world on course for a nature-positive future. ♦



**A**S AN UNDERGRADUATE IN INDIA, SWETHA Stotra Bhashyam was terrified when she learned about the threats of climate change. “I was like, ‘I need to do everything I can to stop it,’” she recalls. “I stopped eating any meat. I stopped using paper. In my college, I would use secondhand printed paper.

“As I learned more, I realized that it is not me as an individual causing the problem. It is the consumption factors in the Global North. One US person consumes as much as seven people in India. One European consumes as much as four people in India.”

Stotra Bhashyam has two master’s degrees, in Wildlife Biology from the National Center for

A leader of the Global Youth Biodiversity Network, **SWETHA STOTRA BHASHYAM** says business around the world needs to listen to young people and respond.

Biological Sciences in Bangalore, and in Zoology from Osmania University in Hyderabad. Since college, she has worked to mobilize young people around the world to help preserve the planet’s biodiversity. One of her key roles is acting as the Global South Focal Point at the Global Youth Biodiversity Network, a platform that seeks to educate about the threat of biodiversity loss and advocate for change. The network has representatives in 140 countries, who typically run local chapters.

On environmental, climate and civil-rights fronts, young people expect a lot out of their corporate leaders. The most connected generation ever, they can organize a protest in less time than a New York commute. Young people are driving a turnabout of

# Expectations of Youth



Swetha Stotra Bhashyam speaks at a rally in Montreal during the COP15 gathering.

decades-old declines in union membership. Young people are flexing their muscle.

A number of factors are at play. First, with labor markets tightening around the world, companies are engaged in a so-called “war for talent” with young, skilled workers in high demand. On the other side of the equation, the younger generation are an increasingly influential consumer group, especially in developing nations like Nigeria, where 70% of the population is under 30. At the same time, age has become a major predictor of political and cultural preferences, and for the “Greta Generation” polling suggests environmental concerns are key. According to a new survey from KPMG, one-third of young people in the UK have rejected a job over employers’ weak ESG credentials, and social media enables easy sharing of these values around the world.

At the COP15 conference on biodiversity that took place in Montreal in November, Brunswick’s Joseph Doyle interviewed Stotra Bhashyam on what business can learn from the world’s youth as well as from indigenous communities.

#### **What are the priorities of the Global Youth Biodiversity Network?**

The youth in our chapters on the ground had thousands of conversations with young people around the world. Their aim was to find out, “What do they think is needed for a future in harmony with nature? What are some of the key priorities?”

We came up with three large priorities. First, intergenerational equity, or equity within and between generations. To bend the curve of biodiversity loss, you have to bend the curve of inequality.

Second, meaningful youth participation, and by meaningful, we mean it has impact that is tracked.

Third is education. Both the climate and the biodiversity crisis are driven by the values and behaviors and priorities we have as a community. Our entire lifestyle needs to change. Our mindsets need to change. Our perspective of what is a good life needs to change. And that can only happen if education changes. And that’s why, for us, education is a key thing that young people are pushing for and very few others here at the COP are pushing for.

#### **What is the role of business in the nature crisis?**

First, businesses need to acknowledge the loss that they have created. They need to be honest about the cause and take ownership of it. That would be a great first step: for young people to see somebody taking ownership where nobody really wants to.

After that, it’s about saying “OK, moving forward

“About 80% of the world’s biodiversity is protected by land that is owned by indigenous communities.”

from what has happened, how do we change?” To take that step, it’s important that businesses develop a dialogue with grassroots communities, indigenous people, women and youth. It’s critical to ask those communities directly how businesses can do better, listen to them, and give them time. I know businesses that have engaged youth, genuinely want young people there, but don’t have time for them.

After listening, business needs to follow up. If we tell you your company really needs to cut down on plastic consumption, and you agree, the next meeting tell us what you did about it.

It’s not about having all the answers—we know these are big challenges. It’s about saying “OK, this is what you said. This is how much we think we can move forward with. This is still a challenge for us, but we are trying in these ways.” That open dialogue would give us hope that you are not just engaging us for some classic tokenism or “youth washing,” but genuinely want to do something better.

One tangible approach I’ve seen work is businesses bringing in young people as advisors. These advisors should not be employees, because employees don’t have the same liberty as someone with an outside perspective to say what’s wrong. As employees, by the way, young people don’t want to work for a company that’s part of the problem. You can’t just throw money at them to get them to work for you. For them, it’s about the planet, too.

To be clear, putting the advice from young people to work might mean lower profits.

#### **Why should businesses form relationships with indigenous communities?**

About 80% of the world’s biodiversity is protected by land that is owned by indigenous communities. With the very little land that they own, they have protected most of the world’s biodiversity. That means if we want to solve this crisis, business must let them be and stop extracting from their land.

Also, indigenous people have a long and ongoing relationship with nature, and there is a power that comes from being connected to the Earth, a wisdom that comes from being connected to the land you’ve lived on for generations. The world needs that wisdom. They have a vision of the good life that our modern society has lost. They have a sense of connection to animals, to their communities, to the planet. They have different priorities. They show us you can have a happy life even without money. ♦

JOSEPH DOYLE is an Associate with Brunswick’s Business & Society team in London.



2022 SAW NOT ONE, BUT TWO MAJOR UN environment conferences. One in Sharm El Sheikh, Egypt: COP27. The other in Montreal, Canada: COP15. Why are there two COPs? How did we go from 27 to 15? What does COP even stand for?

Many businesses are familiar with COP27, last year's UN Climate Change Conference. Since the Paris Agreement of 2015, these annual meetings have become a staple of the international business agenda. Although COP27 drew fewer chief executives than 2021's landmark summit in Glasgow, it had widespread media coverage and attendance by world leaders, such as Joe Biden, and representatives of hundreds of major businesses and civil society organizations.

Meanwhile, COP15—the other COP—is nature and biodiversity rather than climate and is less well known. Held just before Christmas, COP15 was significantly smaller than its climate counterpart. Aside from Canada's own Justin Trudeau, it attracted few heads of state. Although the level of business attendance was unprecedented for a biodiversity COP, the numbers were much lower than at COP27. Nonetheless it produced sometimes tense negotiations that resulted in a landmark international agreement: the new Global Biodiversity Framework. Ratified by 196 countries, it will have significant implications for business over the next decade.

Despite being addressed in separate conferences half a world apart, the climate and nature crises are increasingly being treated as joined imperatives that must be tackled together. Nature has never been as high up the climate agenda as it was at COP27, while opportunities to create double benefits for both climate and nature provided the backdrop for every discussion at COP15.

Both conference series stem from landmark international multilateral treaties of the early '90s. The United Nations Framework Convention on Climate Change (UNFCCC) was established at the Earth Summit in Rio de Janeiro in 1992. It is a multilateral treaty which commits signatory countries—"parties" in UN parlance—to a shared aim of combatting climate change by reducing greenhouse gas emissions. Its nearly 200 parties cover every corner of the world.

The same Earth Summit in Rio de Janeiro saw the Convention on Biological Diversity (CBD) opened for signatories and it entered into force in December 1993. It aims to conserve global biodiversity while also ensuring the benefits of genetic resources found in plants and animals are shared fairly. It has 196

parties, with the US a notable absence.

In both cases, the signatories' representatives assemble at regular meetings, each termed a "Conference of the Parties" or COP for short, where negotiations continue to be hammered out. The climate conferences happen every year, while the biodiversity conferences happen every two years, hence the out-of-sync number series.

# A Tale of 2 COPS

## WHAT COP27 MEANS FOR BUSINESS

### Food & Agriculture

COP27 put "food" on the table with the first-ever day dedicated to agriculture and also a "summit within a summit" dedicated to tackling commodity-driven deforestation.

A fivefold increase in companies in the food sector setting net-zero targets was a welcome sign of progress, however research shows over 90% of those are at risk of becoming undeliverable without immediate improvement on deforestation targets. Recognition is growing that nature action is central to climate action.

In the coming year, look for scrutiny on food and agriculture to rise, especially with the launch of sector-specific guidance, such as the Science Based Targets initiative's first Forest, Land and Agriculture (FLAG) methodology, which are creating uniform expectations for business actions.

### Signals of Change

Conversation around COP27 was buoyed by signals of momentum in the real world, including falling

A climate change COP in Egypt, a biodiversity COP in Montreal—confusing, yes? But their results work in tandem, pushing the world toward significant UN goals. Brunswick's PHIL DREW and JOSEPH DOYLE explain.



costs from the deployment of superior technology, the advent of cheap renewable electricity, increasing electric vehicle sales and planned global infrastructure projects. Analysis by the Energy and Climate Intelligence Unit shows that decarbonization is moving faster in India, the EU and China than the national pledges suggest and those countries could meet their goals sooner than expected. The transition to the net-zero economy is following a kind of Moore's Law of industrial transformation—as technology deployment rises exponentially, costs shrink along a predictable trend line.

### Increasing International Collaboration

One of the most significant announcements was the Breakthrough Agenda—in which governments representing over half of global GDP set out a shared 12-month action plan to help make clean technologies cheaper and more accessible everywhere. Focused on seven high-emitting sectors—road transport, power, steel, hydrogen, sustainable agriculture, cement and buildings—this package of 25 actions includes growing backing to phase out internal combustion engines by 2035 and common standards and procurement targets for net-zero steel and hydrogen to drive down costs. This trend of international collaboration on standards and incentives is

# COP 27

The November 2022 conference on climate change was held in the Red Sea resort town of Sharm El Sheikh, Egypt, on the Sinai Peninsula. With its focus on hammering out agreements toward meeting the goals laid out in the Paris Agreement, the conference made headlines and was attended by top leaders.

likely to continue outside of the COP process.

### Corporate Greenwashing

The much-awaited publication of the UN Secretary-General's High Level Expert Group put forward 10 recommendations to improve the credibility of voluntary net-zero commitments and to tackle greenwashing. This report has quickly set the agenda on what a credible net-zero commitment looks like, with key points including the importance of science-based transition plans aligned with 1.5°C, covering all scopes, with interim targets every five years, and transparent annual reporting on performance. Importantly for companies, the report endorsed the Race to Zero and Science Based Targets initiative as examples of high-integrity routes to commit to net zero. Expect a proposal supported by the UN Secretary-General for countries to set up a Taskforce on Net Zero Regulation this year.

### Ratcheting the Pressure

COP28, planned for November 2023, will conclude the first-ever “global stocktake” on climate action—a formal mechanism to assess whether the world is on track to meet its goal of limiting warming to 1.5°C. This process will shine a light on just how much further action is needed. It will, in turn, pressure





governments to respond more forcibly and increase expectations of businesses and investors to demonstrate how they are aligned with that goal. NGOs are already planning to use this to call out corporate laggards and backsliders.

## WHAT COP15 MEANS FOR BUSINESS

### Ambition: 30x30

The conference's landmark agreement includes a key target, forming a new global goal: protect 30% of the world's land and oceans by 2030 while respecting indigenous and traditional territories—referred to as 30x30. Campaigners such as WWF have hailed the inclusion of 30x30 in the formal agreement as a major breakthrough that will set this new framework apart from past efforts, similar to the Paris Agreement's "well below 2°C" climate goal. Advocacy groups will increasingly campaign for these conservation goals at scale. Companies will be expected to show how production processes and growth plans are compatible with the 30x30 goal.

### Nature & Climate Crises Align

Despite barriers in the past, the link between the nature and climate agendas was stronger than ever at

# COP15

The conference on biodiversity in Montreal, was smaller scale than COP27, but drew the largest business representation for any biodiversity COP. The conference, held in December of 2022, resulted in the ratification by 196 countries of a new Global Biodiversity Framework.

COP15, with an increasing emphasis on joint solutions. Three targets within the agreement explicitly focus on nature-based solutions that generate benefits for climate. Meanwhile the International Sustainability Standards Board, which benchmarks climate disclosures, committed to build biodiversity indicators into their reporting standards.

Corporate action on nature is mirroring the trajectory on climate—it's becoming mainstream. Companies will be increasingly expected to tackle the two crises together and with equal rigor. As with climate, a few organizations will set the agenda: Taskforce on Nature-related Disclosures (TNFD), Science Based Targets Network (SBTN), and Nature Action 100.

### Accountability: National Plans

The new Framework introduces a regular global review process, or "stocktake," to assess global progress toward the targets. Unlike the Paris Agreement, there is not a formal "ratchet" mechanism that would require governments to review their progress and then improve their national plans at regular intervals, but these global assessments will still put a spotlight on delivery and enhance accountability for progress. The focus will now very much shift to delivery, and much will depend on how national

governments embed the agreement into domestic legislation through their National Biodiversity Strategies and Action Plans.

### Implementation: Business and Finance

Target 15 of the new Biodiversity Framework requires large and transnational businesses and financial institutions to assess and disclose “their risks, dependencies and impacts on biodiversity” by 2030 at the latest.

Finance is always a contentious sticking point in negotiations, but most countries saw the explicit pledge to mobilize at least \$200 billion for biodiversity protection per year by 2030—with at least \$30 billion per year from developed to developing economies—as a significant step forward.

Expect the finance sector’s key role to be increasingly in the spotlight and for companies more broadly to be encouraged to scale up investments in nature.

A new  
global goal:  
protect  
30% of the  
world’s land  
and oceans  
by 2030.

### Inclusion: Indigenous Communities

Indigenous peoples are mentioned 20 times in the agreement, with a clear emphasis on human rights-based and indigenous-led conservation models. Indigenous people, who represent 6% of the world’s population but protect 80% of its biodiversity, have been strikingly absent from previous agreements.

This marked shift toward inclusion at the conference is seen as a major development. A representative of the International Indigenous Forum on Biodiversity said: “For us, it’s like a change of paradigm.” Expect pressure on companies to demonstrate how nature plans throughout their value chains support human rights-based and indigenous-led conservation models. ♦

**PHIL DREW**, Partner, was on location at the COP27 in Sharm El Sheikh, Egypt, and **JOSEPH DOYLE**, Associate, was on location at COP15 in Montreal, Canada, for Brunswick’s global Business & Society team. Both are based in London.

## 2 LEADING VOICES ON NATURE



**RITA EL ZAGHLOUL** is a Coordinator for Costa Rica of the High Ambition Coalition for Nature & People, an intergovernmental body of over 116 countries that was the driving force behind the 30x30 target. She writes:

The campaign for 30x30 has been one of the most challenging and wonderful experiences of my life. Building a coalition around this goal came from the fact that I believe in it. If we truly protect 30% of our lands and oceans by 2030, we can bring about

the transformation we need to safeguard our planet. The science on biodiversity loss is clear, and we are looking at a closing window of opportunity.

The Post-2020 Global Biodiversity Framework is historic. Now, we must urgently move on to implementation and that is what we are doing in this new phase supporting HAC members to reach the 30x30 target. The private sector must be a key partner, and its support will be critical. We want to see the private sector taking the lead in changing damaging production patterns to make them more sustainable.

Looking ahead, something that gives me hope is our experience that multilateralism works, despite all the challenges and geopolitical tensions we see before us. The clarity of the scientific reality helps build bridges across political divides. Each and every country in the world is realizing that protecting our planet is not negotiable. We achieved this in the High Ambition Coalition—a coalition of all regions, from Small Islands Developing States to the US.

Our work shows it can be done, and that is the message we must keep repeating.



**EVA ZABEJ** is Executive Director of Business for Nature, the influential advocacy group that leads the business voice at COP15. She writes:

The Global Biodiversity Framework significantly raises the world’s ambition on nature, placing collaboration between governments and business at the heart of a nature-positive transition. It is a recognition that business as usual is economically short-sighted, will destroy value over the long term and will no longer be accepted.

Target 15, in particular, is a strong message: All large and transnational businesses and financial institutions should get ready as governments will require them to assess and disclose their biodiversity risks, dependencies and impacts, at the latest by 2030.

The level of ambition set by Target 15 is central to resetting our relationship with nature. Success will rely on the transformation of entire value chains, sectors and socio-economic systems—underpinned by unprecedented levels of collaboration, innovation and investment. Embracing nature positive will yield sizeable opportunities. Acknowledging the reliance of our economies on ecosystem services could well be the most profitable investment we ever make.

There are plenty of resources already available to help companies respond and the High Level Business Actions developed by Business for Nature and its partners show how these existing tools fit together.

Through Target 15, governments have explicitly stated—for the first time in a multi-lateral agreement—what they expect from businesses on nature. The private sector must now step up and scale up to translate the commitments made at COP15 into effective action and play its part in securing a nature-positive future for us all.





# The Global Landscape

**A**MID A THRONG OF BUSINESS, GOVERNMENT and NGO leaders at the 2022 Paris Peace Forum, Brunswick's Lucy Parker spoke with four experts for a discussion comparing expectations for the upcoming COP15 global gathering on biodiversity and the engagement of business around the nature crisis.

The panelists represented a range of stakeholders in various sectors and various parts of the world who each see business action as central to unlocking solutions for biodiversity. Collectively, the group emphasized the need for data in shaping constructive policy and action, and the critical need for companies to not wait, but to begin immediately on a path toward greater transparency and dialogue on this issue with their relevant communities around the world.

At the **PARIS PEACE FORUM**, four experts discuss the challenges and expectations for business in confronting the world's nature crisis, led by Brunswick's **LUCY PARKER**.

**Laura Waisbich** is a Senior Researcher at the Igarapé Institute, a Brazilian "think and do tank" focused on the Amazon rainforest. The Institute's mission is to contribute to public, climate and digital security, acting as a bridge between global and local imperatives.

**Andy Howard** is the Global Head of Sustainable Investment at Schroders Asset Management. Schroders announced their Plan for Nature in November 2022, including investment insights, company engagement and innovative financing solutions.

**Pauliina Murphy** is Director of Engagement for the World Benchmarking Alliance, which aims to engage the private sector in achieving progress on the UN's Sustainable Development Goals.

**Farid Baddache** is the CEO and co-founder of the social purpose organization Ksapa. Based in Paris, Ksapa works with businesses and investors to help



them build resilience and inclusiveness into their decision making.

Parker led the discussion. A Partner and the Business & Society Global Lead for Brunswick, she is also co-author, with Jon Miller, of two books, the newly published *The Activist Leader: A New Mindset for Doing Business*, and the 2013 *Everybody's Business: The Unlikely Story of How Big Business Can Fix the World*.

**Laura, you're based in the Amazon Basin, which is the hotspot globally of the issues of climate change, deforestation and biodiversity come together, including with communities on the ground. Can you give us a snapshot of the realities for this part of the world?**

**LW:** In the Amazon, which indeed is one of the hotspots globally, at least three environmental planetary crises are unfolding; the climate crisis, the biodiversity crisis and the pollution crisis. On top of

**Lucy Parker was the moderator of the panel to discuss biodiversity. The discussion took place at the fifth edition of the Paris Peace Forum, held at the Palais Brongniart in the heart of Paris.**

that, there is a social and illegality crisis taking place right now. If we are all used to seeing the Amazon as this one place that we need to protect for environmental purposes, we also need to think about it as a hotspot of organized crime.

Nowadays over 90% of deforestation in the Amazon is illegal. Not only the loss of forest, but an ecosystem of environmental and non-environmental illegalities is taking place now. That means illegal logging, illegal mining, land grabbing, agriculture tainted with illegalities, but also corruption, fraud, social violence. So it's also about the social crisis and a governance crisis that's taking place over there.

**A significant focus of your work is providing data about what's going on on the ground.**

Exactly. We consider it important to showcase what's happening. We're not just there to flag the problems, we're there to help find solutions, to help public and private actors to do better.



Part of the response that's needed is to actually understand the context and data. So here at the Paris Peace Forum, we're soft launching the sustainable Amazon dashboard (*see page 66, "Amazônia in Loco"*) which is a platform that combines data from public sources and NGOs like ourselves, to try and shine a light on the dynamics on the ground.

Those in the private sector know the language of due diligence; how to do business is to know your client. We also think you have to know your context. Organizations that are based on the ground, like ourselves and our partners—and we're not the only ones—can help the private sector to know the context they're operating in. You need to know the risks and impacts of your activities on your clients, your partners, on the environment and the communities. Data is definitely part of that.

**Andy, Schrodgers has recently made some significant commitments on nature. Why are you, as an asset manager, stepping into this space?**

**AH:** There's been a huge amount of focus on climate change, quite rightly, over the last few years. But in many ways, you can see it as symptomatic of an even bigger challenge. And that bigger challenge is the inevitable conflict between growing global demand and the world's finite resources. The natural environment is well past the point of being in credit. We've been operating in deficit—and that deficit's been getting bigger. That creates risk and it creates opportunities.

But fundamentally it requires us, the finance industry, to think differently about what our role is across a whole range of areas. At base, the asset management industry is about investing capital into areas of need, and there are few greater areas of need than support for the natural environment. So, for us, this is a critical question about how we think about the way we engage companies, the way we allocate capital. I won't pretend we have all the answers, we absolutely don't. But thinking differently about questions in today's environment is not a choice. It's how we have to run our business and how we have to behave as investors.

**So you aim to influence companies to tackle the issue of nature: How are you doing that?**

There are two things that we try to do. First of all, it's the data. We invest in 16-17,000 companies around the world. We use analysis to identify those companies that are at greater risk, or that are having a greater impact on nature. And we use our voice to push those companies to be more transparent,



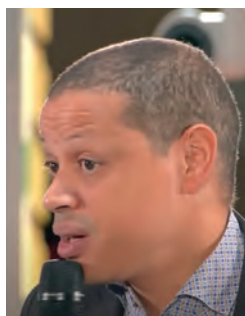
Pauliina Murphy



Andy Howard



Laura Waisbich



Farid Baddache

to establish goals, to establish strategies about how they're going to deliver those goals—and then to hold their hands while they're doing that. Over the last three years we've had over 200 engagements with large companies around the world on how they're managing biodiversity exposure and biodiversity impact within their business. And that's something we try to do across all the portfolios we manage.

The second thing we do is to create new kinds of investment vehicles. We announced a couple of months ago a joint venture with Conservation International based in Southeast Asia to invest in nature in that part of the world. Certainly, we hear from our clients around the world that they want to invest in nature-based solutions, so we're creating a capability to direct capital to areas that can make a difference.

**Farid, in your view, there's a danger that there's a missing link here, in that this needs to land in the reality for farmers. Can you talk about that?**

**FB:** At Ksapa, we're coming with a different perspective. Early targets on deforestation from 2010 were not met. I was part of a lot of deforestation commitments made in 2015 and, to the best of my knowledge, I think it's been really a failure. No corporation had been able to meet zero deforestation targets a couple of years ago.

In response, what we've been trying to do at Ksapa with companies and investors is to put attention on what we see as the missing link. There's a lot of high-level talk about net-zero deforestation, net-zero carbon, biodiversity preservation and so on. But these things are difficult to secure. A farmer at the end of the day or a community on the ground—say, in Amazonia—is coming from a different perspective: need to survive, need to make a living.

**So what can be done in practical terms at that smallholder and community level?**

There are many things that have to be done at that level to encourage more circularity, more intercropping, more diversity of revenues. A lot of things that secure resilient community activities. So, this is the missing link that we try to focus on: combining a lot of high-tech and very smart digital systems that are deployed.

We try to equip communities with simple and accessible low-tech solutions. Making sure they are equipped and aware, that they can get trained, they can flag issues, they can take part in the data collection process. Along with building the right financial mechanisms, we're starting from what they need, in terms of improving yields, maximizing biomass

production and carbon sequestration, for example, which ultimately, after securing additional revenues, enable them to be more resilient, enable them to be qualified as carbon assets.

This requires a lot of the effort on the ground and the right recipe to ensure replicability and scalability, which is why we need the digital platform to manage complexity.

**Pauliina, the common factor coming through so loudly in this discussion is data. From your point of view in the World Benchmarking Alliance, what is the role of data?**

**PM:** Listening to this conversation, I agree with everything. To have effective benchmarks, to understand what companies are doing and where priority actions need to focus, we need robust, good quality data. The data can't just focus on the headquarters of a company, it has to go through the value chain. And getting that good quality data is incredibly difficult—particularly in biodiversity and nature, where understanding corporate impacts on the ground is still a novel approach.

We kind of know what we're doing on climate; we know what we need to measure in terms of emissions, we know we need Scope 1, 2 and 3. But a similar kind of understanding of nature impacts is very difficult. And we're not there yet.

**For you, the point is to drive action. What kind of action do you think the private sector should be taking?**

Exactly. If we have a benchmark but it's just as an academic exercise, nothing changes. Through our benchmarks, when we look at our nature transformation, we look at land and sea use changes, direct exploitation of resources, pollution, indigenous land rights and then the methodology for company assessments. That's, hopefully, informing companies themselves about where their disclosures are not up to standard, or investors who need to know what issues to engage the companies on. That's the idea behind the Benchmarking Alliance.

**Is it possible that sometimes lack of data is used as an excuse for inaction? Do we have to wait for data?**

**AH:** I totally agree that using a lack of data as a reason for inaction makes no sense. In pretty much every area of investment you're dealing with imperfect data and you're making judgments; you're making decisions that are as right as you can get them. When we think about something like biodiversity

“We kind of know what we're doing on climate; we know what we need to measure in terms of emissions ... But a similar kind of understanding of nature impacts is very difficult. And we're not there yet.”

Pauliina Murphy

exposure and impacts, we certainly don't have all of the information we would like. What's really critical is that you frame what question we are trying to answer, what information can we find that will help us answer that question, recognize the shortfalls in that information and then try and work to improve that over time.

For example, we have very little understanding of individual companies' supply chains; it's just not disclosed. But what we can do is look at different industries and get a view of, to what degree that industry is exposed to different countries and to other industries. We can take an imprecise but an approximate view, and then use that to try and understand where to engage and push for more transparency, try and create that virtuous circle of better understanding, better engagement, better disclosure. There is absolutely enough information to get started.

**Laura, in the Igarapé Institute, your data is really focused on what's happening on the ground. Do you have any cause for optimism?**

**LW:** I think we have to be both optimistic but also concerned that we're not doing enough. There is really a lack of political will, and corporate will, to go beyond what is there. I fully agree that whatever data we get, it's imperfect. We value partnerships that are able to take us there and keep improving on that and be meaningful about what we need to do differently. But there is cause for optimism when we see the discussion about bioeconomy in the Amazon right now.

**What does the bioeconomy mean?**

In the case of the Amazon that means economic activity that's compatible with the standing forest—not only the forest itself but also the people and communities, and knowledge that lives around it. So the bioeconomy intends to shift the current paradigm that prospers by destroying the forest.

**Is there any sign that the bioeconomy is happening in the Amazon?**

Yes, there is. There are a couple of examples of production and commodities that are compatible with the standing forest. Some of them are commodities; some of them are fruits or nuts. But scale matters here: We actually need the mainstream to be the bioeconomy, we need agroforestry to be mainstream rather than monoculture.

There's definitely scientific advance in terms of low-carbon cattle ranching. But this is an ongoing



competition between models. We need more private and public investment in order for low-carbon agriculture and low-carbon cattle ranching to be mainstreams. We don't need the expansion of agriculture. What we need is to stop deforestation and improve the productivity of whatever is already there. We need to assume that enlarging the area for agriculture and cattle ranching into forest areas is just the worst business decision you can take.

**Farid, you've said that the 2015 ambitions to halt deforestation failed. So do you see capacity building as the missing link in creating scalable solutions?**

**FB:** Trying and failing happens; the question is what we learn from that. Looking at benchmarking, for example, is very good because that increases emulation in companies. It's a good way to push companies to think harder. Another thing is compliance—that definitely supports the reasons to be optimistic. The European Union among others is particularly active with the directive on deforestation. And for investors through the taxonomy, that's the principle of "do no significant harm."

Data is important for scalability, and for having a landscape approach. It's not about having perfect data but about finding the right smart data level, capable at a landscape level to show if we are on a good trajectory or not; that's what matters at the end of the day.

And for the missing link, it's about defining indicators that align interests of multiple stakeholders—for example, in access to raw material of companies or mitigating risks of conflict, which requires meaningful improvement of practices on the ground in a way that secures compliance for people in companies far away.

**Pauliina, do you think the regulations and frameworks that are coming through need to be mandatory, or can we begin with something which is voluntary?**

**PM:** I would love to sit here and say voluntary initiatives will bring about change. But I don't believe it. I think we need mandatory change. We don't have enough time to sit around and to discuss and discuss and only then discover that it should have been mandatory.

There is some work being led by the EU. They're going a bit faster, they have a taxonomy being developed holistically. But through COP15, we need a strong market signal from the politicians—from which the private sector can really lead the way.

**"We don't need the expansion of agriculture. What we need is to stop deforestation and improve the productivity of whatever is already there."**

Laura Waisbich

**Andy, at Schroders, impact investing is part of your program: What do you want the impact of that to be?**

**AH:** Impact investing is really about investing with an intention of creating a positive social or environmental outcome—which, when you stop and say it out loud, sounds like, "Well, it should all be like that." But the reality is that an awful lot of investment is made into companies in a way that hasn't paid nearly enough attention to what impact that investment will have in the real world.

Unless investments are being done in a way that is ultimately sustainable to communities, to society, to the debt holders of companies we're actually in, they won't prove to be sustainable investments. The private sector doesn't operate in a vacuum where the costs of that operation, the costs of that sector can keep on getting bigger and bigger and imposing more and more costs on the environment, or societies and communities around the world. That's an unsustainable situation that will change.

For us, as companies come under more pressure to behave in a responsible way and a sustainable way, understanding which businesses are sustainable is just common sense.

**Thinking about the global agenda on biodiversity coming out of COP15: In brief, what is the thing that we need to get corporates to do?**

**LW:** I'm going to point to one word—which is ambition.

**Ambition—and speed?**

And speed, exactly. That's what we've learnt from the climate experience.

**FB:** The one thing that I would call for is compliance—meaning mandatory approaches and landscape indicators that have to be smart.

**AH:** I think we are at a moment when we need the private sector to send a clear signal to governments that we would like to see more clarity, we want to see more action toward the ambitions that governments have and how we get there. We're too early at this point, in my opinion, to have mandated action. But we can mandate transparency and that would be a huge step.

**PM:** I fully support that. But then for companies to be ready to disclose along their value chain. We know how difficult that is, but that's where we're going: to share with each other and with governments so we have a collaborative solution.

**Thank you all. ♦**

*Pauliina Murphy leads advocacy and outreach for the World Benchmarking Alliance, which envisions “a society that values the success of business by what it contributes to the world.” At the Paris Peace Forum, she interviewed Brunswick CEO Neal Wolin, a graduate of Oxford University and Yale Law who formerly served as US Deputy Secretary of the Treasury.*

### Neal, are expectations changing for the role that business plays?

Expectations of business have changed. Many stakeholders—employees, consumers, regulators, even competitors—have created a new circumstance in which companies understand that they need to engage in the world in ways they weren’t five or 10 years ago. They understand that if they do it in a thoughtful way, there’s an opportunity for them to explain who they are and make their contribution to progress on some of the biggest issues in the world.

Alternatively, if they sit on the sidelines—try to keep their head below the parapet—there’s a risk for them in that today, including, importantly, with their shareholders.

### Is it all companies or just a few? What trends are you seeing?

It’s not all companies, but more companies than ever understand they need to think about the issues out in the world that affect them, whether those are geopolitical, social or other issues. Authenticity is important: making sure it’s related to their core business model; making sure they’re actually doing things, not just saying things. More and more, the CEOs, the boards, the senior executives at the companies I advise—and that we as a firm advise—understand what the world now expects of them. There’s an observable trend that’s growing in momentum.

### What kind of issues are you seeing companies engage with?

There’s a particular need for companies to respond quickly on climate and all kinds of inequality, as well as questions of global public health—how that affects the companies themselves, and their employees and the communities in which they exist or the broader communities of customers they serve. Those are big issues where companies can think about their role: What’s the part they play? How can they be part of advancing progress? There is no one-size-fits-all template, but companies do need to figure out where they want to be and what works for them in how they position themselves in the world.

Brunswick CEO  
**NEAL WOLIN** was interviewed at the Paris Peace Forum by **PAULIINA MURPHY**, from the World Benchmarking Alliance.



# HIGHER Expectations

And this is garnering substantially more attention at the highest level of companies.

### If a business leader asks you if it’s worth it to engage, how do you respond?

We have a lot of conversations with clients about how to take stock of what matters to them and to their stakeholders, an inventory almost—to understand where it’s OK to be quiet, or to be a follower, or where there’s a risk in engaging or an opportunity to take a leadership position.

There’s a risk sometimes in not being heard. Take the Black Lives Matter movement in the US. Companies that were not seen to respond effectively to the structural questions of inequality, faced a real





downside risk with their employees, and their future employees and their wider reputation.

#### **What do you think of how businesses are responding on issues of sustainability?**

There's no doubt that as a planet we need to accelerate our efforts and push forward with a stronger pace on issues related to sustainability. Some companies are in a leadership role on that and some are more in the wait-and-see category. There is a wide dispersion. What we try to do is to help companies understand what their opportunities are, what the risks are and how to go about this in an authentic way—how to build it into what you do as a business, as opposed to being a sideline activity. It's when you build it into your business model and invest in it that this really takes hold and has the intended effect. You need goals, the ability to track progress and to work in partnership with others. I would say different companies are at different places on this journey.

#### **Is there a backlash?**

It's complicated right now. The political environment in the US, for example, means you're going to make half the country unhappy whatever you do. That's a tricky place for companies to be. That's why it requires companies to be clear about what's important to their business model, what makes sense for them and how they want to show up in the world.

**“It's complicated right now because in the US you're going to make half the country unhappy no matter what you do.”**

It's an evolving situation and, as it develops, there are more and better examples of companies making noteworthy contributions on sustainability issues. I think people will come to believe that it makes sense to have companies alongside governments and civil society as partners in getting from here to there on these big issues.

#### **With so much political uncertainty in many countries, do you think businesses can take a more leading role?**

We try to explain what involvement might look like to take a leading position on biodiversity or climate or health care or the future of work, for example. We show how you might fashion a program, lay out a set of goals and a set of measurable activities that people can understand and see how they're connected to actual progress. As is evident at the Paris Peace Forum, this is not just about involving companies; it's about how the private sector partners with civil society and with governments.

#### **Do you see an opportunity for sharing good practice between sectors?**

There's an enormous opportunity for businesses and governments and multilateral institutions to learn from one another. In my experience, there's not enough sharing of perspectives, understanding, ideas and solutions. Multilateralism is very important in making progress on these issues. Many of the multilateral institutions we have were put in place after the Second World War and they need to meet the current moment. Part of that is having the North and the South in the same conversation. That's where the Paris Peace Forum plays an important role.

#### **How do we hold companies accountable?**

These issues are really about a company's core business. Questions of human capital, health, climate—these are core business issues for a lot of companies. If not this quarter or the next, certainly over the longer term. With accountability comes the need for different stakeholders to be heard; that's how we think about it at Brunswick Group. That's what I think of as accountability and leadership—whether it's within government or companies.

You can't wall yourself off from these questions in this world. I think we need to find ways to establish common cause. The prevailing thought here is that this is a shared endeavor among all these different actors in a very complicated but incredibly important drama. And businesses have the opportunity to be really useful participants in this venture. ♦



# The Playbook

**T**HE ACTIVIST LEADER IS NOT AN ARGUMENT FOR becoming one. “We’re not really trying to persuade people,” Jon Miller says of himself and co-author Lucy Parker. “People know they need to do this. What we show them is how.”

Published in January and subtitled *A New Mindset for Doing Business*, their book shows what it takes for corporate leaders around the world to respond to the intense societal challenges they are faced with. It untangles the many concepts that have emerged—ESG, corporate purpose, social impact, sustainability—and shows that what is really needed is a new approach to leadership.

Their 400-page book aims to be a practical guide

**JON MILLER and LUCY PARKER**, co-authors and co-leads of Brunswick’s Business & Society practice, talk to **KEVIN HELLIKER** about the new mindset of leadership.

through the obstacles certain to arise when leaders couple their financial goals with social goals. With the authors drawing upon their work as co-leads of the global Business & Society practice at Brunswick Group, the book is more practitioner-driven than research-driven, as they put it.

Miller and Parker, Editors in Chief of the *Brunswick Social Value Review*, spoke with *Brunswick Review* Editor Kevin Helliker.

**The popular image of the activist is someone who stands in opposition to CEOs. How did you arrive at the idea of CEOs as activists?**

**JM:** We’ve seen them doing it. Many of the leaders we’ve worked with have started to approach these difficult environmental and social issues with a spirit of activism. They may not call themselves activists. But they see something that needs to change, they



recognize the role their company can play, and they roll up their sleeves and try to make it happen. They don't leave it to somebody else.

**LP:** Most people currently think of activists as those who are trying to rattle the cages of corporates, to get them to change. What we're saying is, "Why wait for that? Why not rattle the cage yourself?"

**The evidence and examples in your book are voluminous, leaving me with the sense that we've reached a tipping point. Have we?**

**LP:** When you look at the scale of environmental challenges—most of all, the climate crisis and biodiversity—and on top of that the intense social pressures, such as demand for action against inequality, then the model that was purely financial looks like it's run out of road. It's the scale of the challenges that's created a tipping point for business.

**JM:** There is an undeniably urgent commercial imperative for businesses to seriously engage with these societal issues. It's coming at business leaders from all directions, from employees who want to know where you stand on particular issues to investors who want to see that you understand the whole new landscape of risk facing business; regulators who are responding more and more forcibly; and social stakeholders of all kinds who are intensifying the pressure that they're placing on businesses in more joined-up and sophisticated ways.

**What would you say to business leaders who are daunted by the idea of "activist leadership"? Maybe they don't want to stick their neck out?**

**JM:** It is daunting. If you're trying to make real change happen inside a business, it can feel like everything is stacked against you. The systems don't want to be disrupted. The markets just want the predictable, familiar models that they're used to. The corporate mindset just wants the status quo. And sometimes for every yes you get, there are 99 no's: "That's too hard." "That'll cost too much." "That'll take too long." "The materials don't exist."

But it is possible. It does happen. In our book you'll find leaders who've pushed past those obstacles, who found a way around them.

**LP:** Unless you can tap into your own conviction that this needs to happen, you will just go with the way it's gone. In the outside world, these issues have momentum, and unless you tap into that force, you'll be drawn all the time back to the historic paradigm. It's a matter of leadership. You have to be driven by the conviction that it's worth leading the business in this direction.

"In our book you'll find leaders who've pushed past those obstacles, who found a way around them."

**You make clear up front that it won't be easy when you say, "Your most contentious areas may be your biggest chance for leadership."**

**LP:** Where a conversation really gets thorny, where the biggest criticism is, where the greatest weakness is, that's where many companies will say: "Can't we talk about something else?"

It really is against the corporate instinct—and it is very much in the activist spirit—to go, "That thing? That's the thing that needs changing." But if you can put your finger on that pulse, if you can listen to that beat, there lies the opportunity for great leadership.

Identifying and focusing on the toughest area also provides clarity on which issues you don't need to act on. Today there is pressure for CEOs, especially in America, to speak up or jump in on a whole range of issues that weren't on their radar 10 years ago. But if you identify your greatest opportunity and you drive progress in that area, you don't have to be pulled in every direction.



**JM:** In the early days when Lucy and I started working together, we met a pulp and paper company in Asia that was very proudly telling us that they were opening tiger sanctuaries in Borneo.

We said, "The tigers wouldn't need saving if it wasn't for the massive amounts of deforestation that companies like you are doing." And they were like, "We can't talk about that"—but it was the real opportunity for meaningful leadership.

Leaders today can't see the world only through the lens of their business but through the lens of, "We are one part of a bigger system. How can we play our role in that system to start making progress on some of these issues?" In other words, business needs leaders who can think like activists.

When leaders really make progress on some of the most difficult challenges, it is massively energizing. People are hugely motivated by it. It unlocks innovation. It unlocks new ways of thinking. It's challenging, but it's also hugely inspiring for people.

**LP:** The leaders who take to it, they could talk to you forever about the challenges around deforestation or the challenges of global health systems or whatever it is. Their minds are operating across bigger questions.

If you actually lead a business in this way, you find that you're healing a divide in yourself, in your family, in your business, in the world. At no level can we afford that divide. And there are business leaders who know that.

**My sense from the book is that what's needed isn't necessarily new leadership but rather a new mindset.**

**LP:** 100%. And the adoption of the mindset can be instantaneous. It's not like you have to learn new skills and do new things before you're ready to be this new kind of leader. It is a frame of mind. It's a frame of reference as to what matters and what you're being asked to do. And then you mobilize as you would mobilize toward any other strategic priority. Once you've got the spirit to drive this, the rest is the nuts and bolts.

Some leaders will say, "We've been doing this for 20 years." And up to a point they're right. They've done as much as they can manage to do without actually disrupting the core of the business. But "incremental" doesn't crack it anymore. "On the fringe" doesn't crack it anymore. Now the question is, "Where are you prepared to be innovative, even radical? Where are you prepared to disturb the core of the business to achieve it?"

**JM:** We have some great stories in the book of leaders who get told by their people, "This is too hard, we can't do it." And the leaders turn around and go, "But what if we had to do it? If we had to create a commercial model for this, what would it look like? If we had to shift the system, where would we start? Because we do have to do these things."

"It's not like you have to learn new skills and do new things before you're ready to be this new kind of leader. It is a frame of mind."

What we show is that disruption can unlock innovation. When Apple hit the limits of aluminum recycling, they invented a new fully recyclable aluminum. Or there's Maersk, which ignored the received wisdom that it was just too hard to radically reduce carbon emissions associated with shipping. They started a revolution in how ships are designed and built and even recycled.

**LP:** If you're actually trying to stop deforestation or improve conditions for women in Bangladeshi factories, you don't stop at the bit you can control. The masters at this are always pointing at the next problem. "We've got this far, but if we're trying to actually achieve zero deforestation or living wages for women, then this is what needs to happen next."

Once you can get there, people aren't blaming you. They're looking for you to be collaboratively, authoritatively, imaginatively coming up with solutions. And suddenly you're standing in a different place in relation to the world.

**Is the media too skeptical about the corporate pursuit of social value?**

**LP:** Journalism at its best holds people accountable. That's its role, and that's incredibly important. But sometimes a journalistic position cannot imagine a company genuinely trying to do this.

For a lot of people gearing up to take this on, one of the things they find daunting is, no matter what they do, no matter what evidence, what answers, what contributions they bring to bear, there's an entrenched skepticism of their motives.

As a leader, you know that the skeptics aren't going to meet you halfway. The best you can do is have conviction on the need, have conviction that you alone can't solve it. You can contribute to it authentically and demonstrate how you're doing it.

**JM:** There's a difference between skepticism and cynicism. Unflinching scrutiny of corporate behavior can only ever be a good thing—and many of the companies we've worked with would say the same thing. But cynicism isn't helpful. Because we all need these businesses to be engaged in these issues.

When Lucy and I started addressing this subject, it was on the margins. Now it's a major agenda item at Davos, with The Business Roundtable—it's gone mainstream. That's going to provoke a backlash, but the backlash isn't the final chapter. Any activist who starts to make progress comes to see the wisdom of that saying, "First they ignore you, then they laugh at you, then they fight you, then you win." ♦

**KEVIN HELLIKER**, a Pulitzer Prize-winning journalist, is Editor of the *Brunswick Review*.

## HOW TO THINK LIKE AN ACTIVIST

- 1 • • • • • **FOCUS:** be clear what matters and why
- 2 • • • • • **PERSPECTIVE:** see it as the world sees it
- 3 • • • • • **PIVOT:** adopt the activist mindset
- 4 • • • • • **AMBITION:** aim to make a real impact
- 5 • • • • • **DISRUPTION:** do something different
- 6 • • • • • **CORE:** take action in the business
- 7 • • • • • **SYSTEM:** drive for systemwide change
- 8 • • • • • **ADVOCACY:** find your voice on the issue
- 9 • • • • • **MOMENTUM:** get going, keep going



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