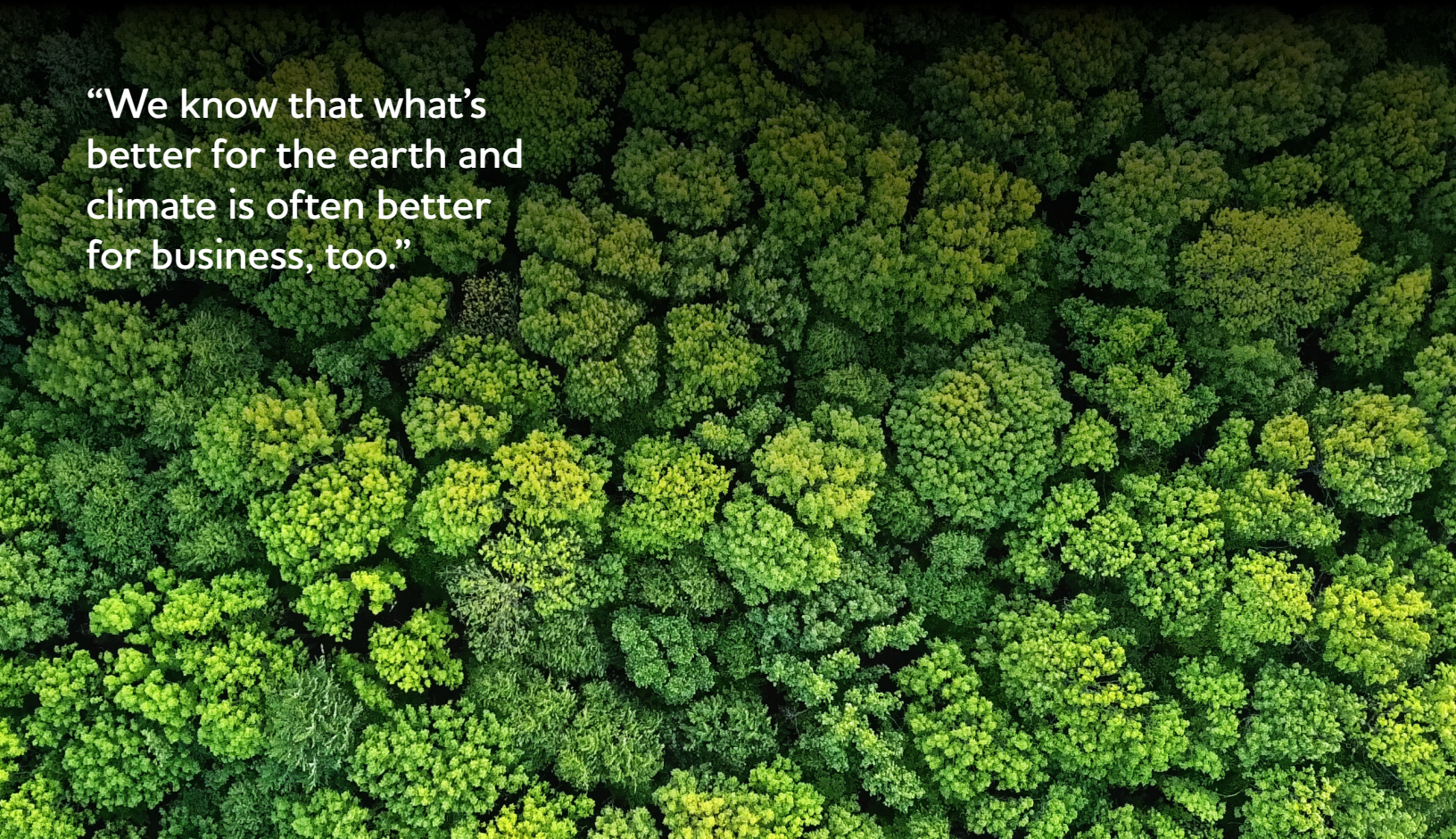


SPECIAL REPORT

# CLIMATE CHANGE







“We know that what’s better for the earth and climate is often better for business, too.”

## Letter from the Editor

The time is *now* to address climate change. This has been the rallying cry from scientists and those in the know for years, and as we head into a crucial year for rebuilding our world in a more sustainable way, the call has reached a fever pitch.

But solving the climate crisis won’t happen overnight, and it certainly won’t happen in silos. Innovative solutions and collaboration across countries, sectors, governments, and industries must be part of the conversation if we’re going to succeed, sustainably and equitably.

This is a topic that’s near to our hearts at Palladium and The Catalyst. With operations in over 90 countries, many, if not all of our projects and initiatives have sustainability at the core of each of their missions. We recently solidified our commitment to fighting climate change by signing up to the Business Ambition for a 1.5 degree future, a global call to action on climate change under the Science Based Targets initiative along a coalition of UN agencies, businesses and industry leaders.

Our work reflects that commitment and always has, long before recent years were dubbed the ‘Year of Climate Action,’ because

we know that what’s better for the earth and climate is often better for business, too. We’re on the edge of change and though scientists say there’s still time to mitigate and adapt to address the rapidly worsening crisis, it will require innovative solutions, partnerships, and a rapid shift in how investors value natural assets.

The articles in this edition of our Special Report are curated from those published by our thought leaders and reflect their unique perspectives on addressing climate change, be it a particular industry, stakeholder, case study, or point of view.

I hope you’ll find something in these pages that resonates with you, and, if so, I welcome you to get in touch.

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All the best,

**Elizabeth Godo**

Director of Communications, Palladium  
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# Investing in ‘Green Gold’

BY  
**Jose Maria Ortiz**  
Managing Partner, Palladium

## ABOUT THE EXPERT

Jose Maria has more than 20 years of experience helping government and private sector organisations transform the societies where they operate, most recently in Europe, Africa, and India. As Palladium Managing Partner in EMEA and head of Impact Investments, Jose Maria is passionate about unlocking the power of capital to deliver long-lasting solutions to socioeconomic challenges.



2021 will be the year of renewed focus on climate change. As the United States renews its commitment to the Paris Climate Agreement and the United Kingdom prepares to host the upcoming COP26 climate negotiations, climate policies must be accelerated towards net-zero, and quickly.

Industries will develop and grow in response to the ambitious climate targets set by the global community, but one of the most important shifts to emerge will be the establishment of forests as an asset class.

Forests make up 33 per cent of the solution to decarbonisation and 2021 is the year when early business models around forestry will emerge, creating enormous opportunities and drastic transformations. I predict that we will see a massive change in the level of commitment that countries are going to make against carbon emissions and the sophistication of the solutions we develop to do so.

**“Simply put, there is monetary value in a standing forest, and it isn’t just because of climate change.”**

## PRESERVING FORESTS

According to Partnerships for Forests, a UK-funded program that supports investments in forests and sustainable land use, [about a quarter of global greenhouse gas emissions](#) are the result of deforestation, agriculture, and other land uses. As populations, incomes, and demands for food, fuel, and fibre increase drastically, there will be an increased pressure on forests and their survival.

Reforestation is certainly required, but if policymakers and governments want to truly tackle the climate crisis, we must

focus on preserving existing forests. [Recent research](#) has shown that mature natural forests store more carbon than plantation forests, but these benefits can take centuries to emerge and act on slowing the accumulation of CO2 in the atmosphere.

Doing so won’t come cheap. Researchers from the research institute, RTI International, found that by 2055, it would cost as much as [USD 393 billion per year](#) to plant and protect enough trees to reduce 10 per cent of the total emissions needed to restrict climate change to 1.5 degrees Celsius.

## INVESTING IN FORESTS

Where forests were once viewed as an investment liability (due to the [length of time before investors see returns](#) and because assets are often ‘illiquid’), now is the time for economic incentives and investment in the preservation and recovery of forests globally.

For billions of years, forests have acted as the world’s most effective carbon removal technology, but more often than not, the short-term economic gains from degrading or converting forests have outweighed the long-term gains of leaving them standing.

Simply put, there is monetary value in a standing forest, and it isn’t just because of climate change. These forests are worth far more standing than chopped down for timber, and traditional solutions already exist in many places.

We have the opportunity to scale up and invest in the trade of sustainable, high-value forest commodities, supporting carefully designed business models that combine high-intensity agricultural production with the protection of adjacent forests.

New solutions are emerging too: innovative business models that reflect the true value of nature’s ecosystem services. For these ideas to succeed and scale up, the right enabling environment is crucial.

They will appear in countries whose governments move first to remove the economic incentives that have long driven environmental destruction (such as subsidies for monoculture farming) and design the right frameworks to govern new markets for ecosystem services. These will likely include carbon, biodiversity and habitat creation, and natural solutions to flood risks and tackling water pollution. The UK Government is currently setting an inspiring example for how this can be done, thanks to its new Environment and Agriculture bills, and new markets for nature restoration will swiftly emerge in the UK when these bills are passed.

When the right conditions align and these new investment opportunities emerge, the challenge will be to identify and develop projects to an investable point. Developing an ecosystem for pipeline is critical. We’re seeing the creation of more and more funds to invest in forests, but they’re struggling to find businesses ready to invest. The priority in the coming years will be to create the projects and environment

**“We’re seeing more funds to invest in forests, but they’re struggling to find businesses ready to invest.”**

that allow investors to successfully deploy capital at scale for ecological restoration.

Interesting partnerships will emerge between multinationals in many sectors, governments, development organisations, NGOs, and offtakers to find the best means to invest in nature and forest preservation.

## BUILDING AN ECOSYSTEM TO CHANNEL INVESTMENT

2021 will see a huge deployment of capital to forests – a transfer that requires the appropriate business infrastructure to absorb. Building a sustainable investment ecosystem that inspires growth over time will be key to mitigating the risk of an overflow of capital, which tends to create inefficient solutions and could fuel corruption, especially in countries that face governance challenges.

The crucial pieces needed for this ecosystem are pipeline development and the redefinition of economic incentives for natural capital outcomes. If governments, foundations, and multinationals focus on solving for these two elements, the result would be a framework for capital to flow into businesses that protects forests and increases livelihoods in their communities.

Supporting this shift will require cooperation and coordination across the private sector, governments, and financial institutions, but it’s never been more imperative than the current moment to focus energies and investments on forest preservation. [P](#)



# The Circular Economy: Towards a More Resilient Future

BY  
**Christina Shim**  
Regional Director, Palladium

## ABOUT THE EXPERT

Christina leads Palladium's Commercial Innovation Practice out of New York City. She specialises in corporate sustainability, market entry, and transformational business strategy. Christina's client and partners have included Fortune 500, Global 3000, and private equity firms, as well as federal government organisations. Her global experience includes time with Booz Allen Hamilton, Bain & Co, and PricewaterhouseCoopers.

The world as we knew it is no longer viable. Our landscape has been altered beyond recognition by the COVID-19 pandemic, leaving us with an opportunity to completely reimagine what's possible. Air pollution globally has plummeted thanks to the shutdown of many industrial activities, and literal blue-sky thinking is now available across the globe. A reclaimed appreciation for our environment gives us hope for a greener future.

There is no better time to embrace Inclusive Growth, creating stronger economies and more inclusive societies. What we need now is the blueprint to get us there, and the idea of the "Circular Economy" has recently resurfaced in discussion around the economic development table.

According to Palladium Managing Director Christina Shim, the Circular Economy is not

a new idea, and much has been said whilst saying very little about the nuts and bolts.

"The term can be used fairly liberally, which is effective at getting people excited," Shim explains. "But it can also dilute the concept and confuse people in terms of what it actually means."

## WHAT IS THE CIRCULAR ECONOMY?

In short, the Circular Economy is one that is restorative and regenerative by design. At its most straightforward, it's a closed-loop system based on three principles that support economic activity that builds – and rebuilds – overall system health:

- Designing out waste and pollution
- Keeping materials and products in use
- Regenerating natural systems

Is it a simple concept? Absolutely. But it's one that's struggled to take hold at any scale in the past. "Companies traditionally have a hard time innovating because they're comfortable with business-as-usual," says Shim. "They aren't sure how to rethink their business models, and even when they do consider alternatives, it can be difficult to scale due to a lack of infrastructure, cultural and internal inertia, and other barriers."

Even consumer demand has yet to be enough of an incentive. "Consumers may be intrigued by the idea, but they're rarely willing to pay more or be inconvenienced."

Despite this, there are examples of the Circular Economy in practice, such as Nespresso, who was heavily criticised

## "The Circular Economy represents a powerful tool to achieve global climate targets."

for their disposable aluminum pods. In response, they created their own recycling system to collect the pods for recycling, and even partnered with Rio Tinto, a major mining and metals company, to source their aluminum sustainably with environmental and social considerations.

In the wake of COVID-19, organisations worldwide are being forced to reimagine their business models and seek out similarly innovative, inclusive new approaches. With this global wakeup call comes opportunity.

## ORIGINS AND APPLICATIONS

Scientists have shown that the Circular Economy has origins in ancient history. From the reuse of broken ceramics to Roman recycling and melting down glass, this is a model with roots in the Bronze Age.

In more recent history, the Circular Economy as a concept dates back to the 1970s, and has evolved significantly over the past 50 years with influence from sustainable development, the green economy, the performance economy, life-cycle thinking, shared value, and eco-design to name a few. The original intention was to promote a world where nothing goes to waste and the opportunities for a greener future persist.

By designing out waste and pollution, keeping products and materials in use, and regenerating rather than degrading our natural systems, the Circular Economy represents a powerful tool to achieve global climate targets.

The concept has picked up steam in the past several years following a 2013 report commissioned by the Ellen MacArthur Foundation, and the establishment in 2018 of the Platform for Accelerating the Circular Economy (PACE), launched by the World Economic Forum and over 40 other public and private sector partners.

These efforts are demonstrating that by taking the linear model – one of take, make, and dispose – and closing the loop, we can achieve a sustainable growth model. In this way, the potential benefits of shifting to a Circular Economy extend beyond the natural environment and into economic growth.

## ECONOMIC OPPORTUNITY

"When the Circular Economy is done right, it creates Inclusive Growth," says Shim, who specialises in the design of Inclusive Growth strategies. "A waste management system designed for the Circular Economy would not only be more effective in collecting waste, but would create new economic models such as manufacturing using renewables and scraps, energy from biogas released from organic trash, compost, carbon capture facilities, etc. – all creating new job opportunities while protecting the environment."

And what could this Inclusive Growth represent in terms of financial opportunity? The World Economic Forum puts the figure at \$4.5 trillion. With increased revenues from new circular activities and lower production costs driving more productive utilisation (thanks to efficiencies gained through the examination of inputs), we can predict significant economic growth as defined by GDP. As Shim notes, the potential for job creation is also prevalent, with increased spending fuelled by lower prices for higher quality, labour intensive recycling activities, and the need for higher skilled remanufacturing jobs.

## BRINGING THE CIRCULAR ECONOMY TO LIFE

Once we understand the underlying principles and potential of the concept, we need to ask ourselves how we can think and behave differently. A transition to a Circular Economy requires a new outlook; market strategies, competitive models and ultimately, consumer behaviour need to change significantly. Where can we, as individuals, start to help to make the Circular Economy a reality?

A key differentiator in the circular model is the distinction between consumers and users. In our current, linear economy, we primarily think about individuals as consumers, but is that a necessity? In the Circular Economy, the only materials considered consumable are biological. Technical materials, by contrast, are used rather than consumed. While a subtle distinction, this difference in mindset provides an opportunity to rethink product use, and ultimately manufacturing levels.

The flip side to the consumer coin is, of course, that of the capitalist. Where is the benefit in reduced manufacturing to the manufacturer? We may produce less, but we do it smarter, increasing efficiency in our manufacturing processes and, as a result, increasing profits. The shift to a Circular Economy means more recycled inputs and less virgin material, reducing cost uncertainty and increasing resilience. The threat of supply chain disruption is mitigated.

**"A transition to a Circular Economy requires a new outlook; market strategies, competitive models and ultimately, consumer behaviour need to change significantly."**

## SYSTEMIC POST-COVID SHIFTS WILL DRIVE SUSTAINABLE GROWTH

As we move past the current pandemic crisis and into global recovery, we're presented with an opportunity to redesign a sustainable, inclusive economy. This will be no easy feat, and systemic solutions are required. Shim imagines this new world as one where different systems and industries have collided:

"What if we were able to combine industries to create a system where farmers and miners use biogas from a waste management facility, the mining company provides water to farmers from their water runoff treatment plants, farmers provide food locally for workers in all industries while also supplying a food manufacturing company, and the food company provides the biowaste for the waste management company to create the biofuel?" she asks.

"We're talking about opportunities for businesses to integrate with their business ecosystem, reducing their burden and sharing responsibilities with partners in new business models and new revenue streams."

Circular thinking gives us a chance to provide economic, social and environmental benefits; to revitalise industries while preserving vital biodiversity systems and tackling climate change. This closed loop approach presents the opportunity for sustainable growth – a latticework representing interconnected businesses that build resilience for everyone.

Let's not waste this opportunity. [↪](#)



# A Brief History of Climate Change and How Nature Fits into the Conversation

BY  
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and Natural Resources Group, Palladium



## ABOUT THE AUTHOR

Stephanie works in Palladium's Climate, Environment and Natural Resource team supporting projects on monitoring, evaluation, and learning and gender equality. Prior to joining Palladium, she was a freelance research consultant, working on topics such as loss and damage, migration, and adaptation for NGOs, think tanks, and UN organisations.

**“Countries worldwide can use nature to bring them closer to a zero-emissions trajectory and bring value and incentives to protect remaining forests and landscapes.”**

*Although the benefits that nature can bring to tackling climate change are well known, the term ‘nature-based solutions’ is relatively new in the climate change space but has the potential to bring together both adaptation and mitigation experts to design something truly transformative.*

Despite the massive disruptions of COVID-19, 2021 will go down in history as one of the most important years in the fight against climate change and biodiversity loss. The eyes of the world will be on global leaders as they convene in China for the 15th UN biodiversity conference (COP15) and in Glasgow for the 26th UN climate talks (COP26).

Encouragingly, the pandemic seems to have only postponed major announcements on countries’ climate change ambitions. Not only is the issue of climate change

becoming more mainstream in media, but the focus has broadened to include nature, biodiversity, and nature-based solutions (NBS) at the forefront.

But what does all this mean? And what lessons can be learned from the past to ensure that we harness the opportunity to change our trajectory moving forward?

## A BRIEF HISTORY OF THE SCIENCE AND POLITICS OF CLIMATE CHANGE

Research on the greenhouse gas (GHG) effect dates back to the 1850s with John Tyndall, however, it was only mainstreamed in the 1970s and ‘80s with the discovery of the ozone hole in 1985. This was shortly followed by the confirmation of global warming in 1988 by James Hansen and the establishment of the International Panel on Climate Change (IPCC) to act as an independent body to assess the scientific literature on the climate change process.

By the 1990s, there was growing optimism that collective action could address unsustainable global consumption. This was seen at the Rio Summit that built on the success of previous international efforts, such as the Montreal Protocol that led to the phase-out of HCFCs and HFCs found in refrigerators, aerosols, and solvents. With a hopeful outlook, the Worldwatch Institute labelled the decade as the “turnaround decade”.

In 1990, the IPCC published its first report that made it clear that global actions were needed and needed fast. As a result, the United Nations Framework Convention on Climate Change (UNFCCC) was established to organise global leaders annually to discuss the issue. By 1997, UNFCCC parties had agreed to a set of targets (also known as the Kyoto Protocol) that committed rich countries to emissions targets and ran until 2020. The Paris Agreement has since replaced the Kyoto Protocol, allowing each country to set their own emissions target.

Until Kyoto, scientists and policymakers focused on mitigation – the efforts to limit global warming by reducing GHGs – mainly associated with the shift from coal, oil and gas, to clean energy sources. But as research on the effects of global warming improved, the air of optimism shifted with the realisation that mitigation efforts weren’t enough: countries and populations needed to adapt to the consequences of global warming.

By the early 2000s, while mitigation remained the primary focus for rich countries (also known as Annex I countries), adaptation was increasingly the focus for countries in the Global South that were disproportionately affected, despite contributing the least to global warming. While academics argued about the differences between adaptation activities and development assistance, for many people and countries, these lines were blurred. Guided by academics and NGOs, by 2010, the Global South had successfully rallied rich countries to pay for adaptation projects and convinced the global community to an equal split in finances between mitigation and adaptation activities.

Despite the mitigation/adaptation dichotomy’s roots in global politics, actual funding available for climate change is nowhere close to what was initially committed. In addition, cross-cutting projects – those that bring both adaptation and mitigation solutions – are increasingly common but pose challenges around how they are monitored and reported.

**“The cross-cutting benefits of nature are part of the reason for the growing prominence of nature-based solutions.”**

## WHERE DOES NATURE FIT?

Nature, biodiversity and nature-based solutions are some of those cross-cutting topics. Forests help reduce emissions by acting as carbon sinks (mitigation), but they can also help societies adapt to climate change by lessening the brunt of disasters and providing people with a source of livelihood (adaptation) – for instance, through non-timber forest products such as coffee, honey, cocoa, etc.

The cross-cutting benefits of nature are part of the reason for the growing prominence of nature-based solutions. Their importance stood out at the 2021 Climate Adaptation Summit in January, which saw leaders express their support on climate adaptation, including the new US Climate Envoy, John Kerry, who gave his first major speech since the US re-signed the Paris climate accord.

In the same month at the One Planet Summit, the UK’s Prime Minister, Boris Johnson, revealed the country’s plan to spend at least GBP 3 billion on nature and biodiversity over the next five years.

## ADDRESSING CLIMATE CHANGE WITH NATURE

Nature investments and nature-based solutions are not a silver bullet to solving the climate crisis, but they bring enormous adaptation and mitigation benefits. Countries worldwide can use nature to bring them closer to a zero-emissions trajectory and bring value and incentives to protect remaining forests and landscapes.

While nature has always played a part in the debate, its potential has been somewhat thwarted by the mitigation/adaptation divide.

New terms like nature-based solutions run the risk of hitting the reset button on over 40 years of projects and lessons on climate change. There are major lessons to learn from other similar types of concepts (such as ecosystem-based adaptation) that donors should consider when designing new programs. For example:

1. Local communities need to be central in the design of any nature-based solution program. For these to be transformative, community members should have choices and a say in decision-making.
2. There needs to be diversity in the design and decision-making of new programs that require at least a balanced representation of women and men.
3. Companies and investors need to be part of the conversation from day one and not just part of the exit strategy.
4. Solutions need to speak to country-level policies and priorities to ensure programs are complementary. To this end, recipient governments need to be part of the design to avoid creating parallel activities.
5. Procurement and delivery of nature-based solutions programs need to be transparent, value diversity of suppliers and have effective measures to monitor and evaluate activities.

The average global temperature since 1980 has shot up tremendously (beyond even what the first IPCC report could have anticipated) and, at its current rate, is expected to reach 1.5C by around 2035. The implications of this will be disastrous and require a concerted global response both to help societies recover whilst continuing to curb our emissions.

There’s a massive opportunity to question the adaptation/mitigation dichotomy and support donors and companies to ramp up investments in biodiversity-friendly business models and mainstream climate risks across all sectors, a change that should have happened 40 years ago. [P](#)



# Climate Change Action Requires a Focus on Job Creation

BY  
**Louisa Cass**

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## ABOUT THE AUTHOR

Louisa Cass leads Palladium's climate change work in the Asia-Pacific region, which is focused on integrating climate change resilience across sectors such as agriculture, health, and infrastructure and on supporting the transition to a low carbon future. Over the past two decades, Louisa has worked with governments, business and civil society in Australia and internationally to develop collaborative partnerships for positive social, economic and environmental impact.



When U.S. President Joe Biden convenes 40 world leaders for the Leaders' Summit on Climate Change on April 22 – Earth Day – a key focus will be on the economic benefits of and opportunities for good-paying jobs that climate change action offers communities and workers around the world.

Over the last 30 years, even as the science has become increasingly recognised as consensus-based and accepted, a critical barrier to action addressing the climate crisis has been that the consequences for economies, carbon-intensive industries, and the people they employ have often been cast as slowing economic growth and threatening jobs.

These fears have been felt by governments across the world, particularly in electorates dependent on fossil fuel or energy-intensive production, such as the Bowen Basin in Australia, Aberdeen in the U.K.,

or Pennsylvania in the U.S. In many of these regions, voters have voiced their concerns that they would be left jobless or in communities made less prosperous and vibrant by the exit of their main source of economic activity.

These concerns have led to compromises and in some instances stalled government commitments and polarised communities on urban and rural divides.

Under President Donald Trump, the U.S. became the first country to withdraw from the Paris Agreement “because of the unfair economic burden imposed on American workers, businesses, and taxpayers by U.S. pledges made under the [Agreement](#)”. The 2017 decision took effect in November 2020 and was immediately overturned by President Biden when he took office, with a commitment to harness opportunities for “[well-paying union jobs](#)”.

“Even promising approaches such as nature-based solutions require fundamental shifts in productive capacity and for many, a shift in their identity.”

In Australia, climate politics have been prominent in recent election cycles. Now, the government is showing signs it will take more ambitious action to reduce carbon emissions that Prime Minister Scott Morrison assures will still preserve “the jobs and livelihoods of communities right across the country, especially in regional [Australia](#).”

## CREATING THE JOBS OF THE FUTURE

These political decisions are part of a growing momentum towards achieving net zero emissions by governments and the private sector worldwide. They demonstrate the importance of actively engaging with the tensions and opportunities inherent in the transition to a new, clean energy economy to ensure all communities and workers benefit in the long-term.

Achieving this will require a concerted, collective effort, stimulating new economic activity with jobs and innovation that directly contributes to decarbonising the global economy. While at the same time, mitigating the impacts of declining industries by supporting workforces to adapt existing skills or develop new ones demanded by emerging and future industries.

The most pronounced impact will be in the coal mining and energy sectors, as those within the sector move from fossil-fuel dependence to renewable energy. As outlined in [Just Transition: Implications for the corporate sector and financial institutions in Australia](#), prepared by the Institute for Sustainable Futures for the Global Compact Network Australia and National Australia Bank, these processes must be planned.

“If the transition (to net-zero carbon economies) is undertaken poorly without the creation of alternative industries and labour redeployment, there will not only be ‘stranded assets’ – but also ‘stranded workers’ and ‘stranded communities’ with high unemployment,” states the report.

For example, in the hydrogen industry in Australia, recent [analysis](#) of the job roles, skills, qualifications, and experience required for the emerging field found that many of the skills are transferrable from the gas sector, manufacturing, or project management. Other roles are new, such as technicians required to build and maintain fuel cells for hydrogen storage. The essential skills range from entry-level trades to advanced qualifications and experience, particularly in science, technology, engineering and mathematics (including research and development), operations, and management. Meanwhile, evolving technologies mean that roles and skills will also develop in tandem.

Critically, the right skills will be needed at the right time to attract investment and stimulate development.

But achieving this at scale will require a combination of targeted, demand-driven short courses and on-the-job training for apprentices and tradespeople to meet short-term needs. There will also be a need for longer-term investments in training, vocational and higher education pathways for systemic repositioning of the workforce to meet emergent and future needs. Universities have a doubly important role in providing skills and knowledge and developing new technologies while promoting public dialogue.

## MANAGING THE CHALLENGES OF TRANSITION

The task is not easy. As with the mining sector, the peak demand for renewable energy jobs often comes during the construction phase, after which fewer roles are required for operating and maintaining infrastructure. Along with these challenges, communities in regions earmarked as high potential for renewable energy

“Critically, the right skills will be needed at the right time to attract investment and stimulate development.”

industries may not have the skills required and, in some instances, are affected by intergenerational unemployment and underemployment.

These projects can stimulate fly-in, fly-out workforces or dependencies on imported supplies, which can reduce the economic benefit for local communities, including pressures on housing markets due to higher incomes of mobile workers. Lessons need to be learned from the mining and energy sectors. Prioritising local workers or those who are prepared to live in local or nearby regional centres is therefore critical, as well as promoting procurement practices that support local businesses and supply chains. Support and incentives must also be provided to workers ready to move to find jobs.

Progress will occur to differing extents across all sectors as they decarbonise and build resilience to climate change, including infrastructure, manufacturing, transport, agriculture, and food production.

Even promising approaches, such as nature-based solutions, require fundamental shifts in productive capacity and for many, a shift in their identity. Where once a farming family may have worked their land for cropping or livestock production, a move to sequestering carbon, for example, means they will now focus on protecting it – requiring different roles and ways of life.

Therefore, it is crucial that climate change action is underpinned by equitable, inclusive opportunity and informed by social and cultural considerations as much as by political and economic issues.

## CHANGE REQUIRES LONGER-TERM, COLLECTIVE SOLUTIONS

Such change requires place-based, localised solutions, where businesses, governments, workers, consumers, community groups and members come together to create a shared vision of the future, well in advance of the change taking effect. Planning also needs to take account of the demographics of different workforces.

For example, in Canada, a [Task Force on Just Transition for Coal Power Workers and Communities](#) consulted extensively with workers, communities, businesses, and unions in provinces affected by the phase-out of coal-fired electricity generation. The Task Force's advice to the government resulted in public-private initiatives ranging from re-training schemes and worker transition centres to assist coal miners looking for employment to pension schemes for older workers, infrastructure, and community investment.

Critical to these processes' successes were long lead times for closures, advance planning, community engagement to develop a social compact, joint public and private funding for action, and economic diversification. This echoes experience globally of what has worked and, in their absence, [what hasn't](#).

These approaches are already informing initiatives, such as the European Commission's 150 billion Euro [Just Transition Fund](#) in public and private finance. The Fund will focus on the economic diversification of regions in the European Union most affected by the climate transition and on reskilling and active inclusion of their workers and jobseekers.

As social scientist Rebecca Huntley writes in her book, [How to talk about climate change in a way that makes a difference](#), policy-makers and businesses must always remember that people are the solution. Only by engaging with the rational and emotional, shifting the dialogue to “three parts hope for every one part fear,” will we see widespread individual, community, and country-level change. 🌱



# Biodiversity-Friendly Business Models Already Exist – They Just Need to be Scaled

BY  
**Lucy Garrett**

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Palladium



## ABOUT THE AUTHOR

Lucy manages the portfolio of global initiatives aiming to reduce tropical deforestation under Palladium's Partnerships for Forests (P4F) programme. Based in Bristol, UK, alongside portfolio management, Lucy specialises in external relations and knowledge, and has designed and delivered strategic engagements, events, and products to share learnings from P4F.

As policymakers, environmentalists, and business leaders prepare to convene virtually for [New York Climate Week](#), the need to act on climate and biodiversity has never been more pressing. COVID-19 has disrupted our global finance systems and ways of life, serving as a wakeup call that humanity's dysfunctional relationship with nature is a symptom of our unrestrained exploitation and encroachment upon it.

The sheer scale of the challenges before us can be overwhelming, but according to a [recent report](#) published by [Partnerships for Forests \(P4F\)](#), practical examples to reduce deforestation and build a better future already exist.

Right now, virgin rainforest and other valuable ecosystems are being cut down and converted to commodity monocultures (single crops such as palm oil and soya), which is good for short term profits, but comes at the expense of biodiversity and forests across key tropical biomes are shrinking rapidly.

Despite its destruction, over half the world's GDP depends on nature and its services, generating around USD 44 trillion in economic value.

**“The key is to apply the right model in the right landscape, and to ensure benefits to local communities.”**

But there is a win-win solution. Forest-friendly regenerative business models represent alternatives to business-as-usual and can generate billions of dollars in investment opportunities, while mitigating nature-related risks. These models are crucial to tackling climate change, protecting species against extinction, creating jobs, and building social and economic resilience to future shocks.

With a portfolio of business models in Africa, South East Asia, and Latin America, P4F has identified three replicable approaches to forest-friendly business from amongst its partners. The key is to apply the right model in the right landscape, and to ensure benefits to local communities.

## 1. BUSINESSES THAT ENHANCE THE VALUE OF EXISTING FOREST BY CREATING LIVELIHOODS FOR LOCAL COMMUNITIES.

Coffee production has been a tradition in Ethiopia for centuries, thanks to the native arabica plant. Currently, a new, premium forest coffee brand is being developed from 150,000 hectares of forest. Local communities and farmers are being rewarded with premium prices for harvesting forest coffee sustainably, providing an increased income to around 10,000 farmers and an annual export value of approximately GBP 21 million.

Beyond being great for business, the forest coffee harbours a rich secret: its genetic code. The Kafa Biosphere Reserve where locals collect wild coffee has 5,000 native arabica coffee varieties. The reserve is also home to 100 bird and 48 mammalian species, including the black and white colobus monkey. By creating financial incentives for local communities to protect the forest and the coffee, therein, this business model safeguards rich genetic resources that can be used to breed disease resistant, higher yielding coffee plants globally.

**“Despite its destruction, over half the world's GDP depends on nature and its services.”**

## 2. BUSINESSES THAT BRING VALUE TO FOREST REGROWTH BY INVOLVING LOCAL COMMUNITIES IN RESTORATION.

Forest restoration on degraded land is typically expensive and labour intensive – but it doesn't have to be. In Brazil, the Xingu Seeds Association (ARSX), who recently won the [Ashden award for Natural Climate Solutions](#), is a network of 560 seed collectors that promotes an innovative restoration technique called direct seeding. Direct seeding involves mixing seeds from native species and planting them directly in the ground. Compared to traditional seedling-based reforestation, direct seeding is 60% cheaper, more efficient (20 times more trees can be planted per day), and results in denser, more diverse forest by mimicking the natural restoration process. This makes it attractive to farmers, offsetting their environmental liabilities under the Brazilian Forest Code, which requires them by law to reforest a portion of their land.

As well as restoring forest biodiversity, ARSX helps preserve traditional knowledge. In addition to rural and urban collectors, seed collection is undertaken by indigenous peoples living in the Xingu basin, who are responsible for the maintenance of 92% of the region's natural forest. The collection and processing of native seeds is deeply connected with traditional knowledge, experience, and culture. For example, given their knowledge of forest natural cycles, the elders suggest the best time to collect seeds, whilst identification of the best tree species and areas from which to collect is based on forest observation linked to everyday activities.

## 3. BUSINESSES THAT INCREASE PRODUCTION EFFICIENCY ON DEGRADED LANDS AND CREATE ROBUST FOREST PROTECTION MECHANISMS.

The Juaboso-Bia landscape in Ghana is a key cocoa producing area and home to many forest reserves and national parks. The main protected area provides habitats for over 160 bird and 62 mammal species, including the threatened chimpanzee, forest elephant, and leopard. P4F works with Touton, a private cocoa trading company, and partners to implement a landscape governance approach to help communities manage the land sustainably. This includes creating financial incentives for local people to adopt climate-smart agricultural techniques, protect remaining forests, and regrow trees in cocoa areas. The business model supports over 17,000 cocoa farmers and brings approximately 180,000 hectares of land under sustainable management.

The key to the success of the model is ensuring landscape governance is inclusive of all stakeholders. As Ernest Dwamena from Touton puts it, “The surest way to achieve zero deforestation outcomes in cocoa and forest landscapes is for all stakeholders and value chain actors living and working in the landscapes to work in concert in providing pragmatic solutions to deforestation. Working in silos and not at a landscape scale will only give marginal results”. [↗](#)



# Four Ways Humanitarian Aid Can (and Must) Go Greener

BY  
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## ABOUT THE AUTHOR

Palladium's Nicola Davey has been tasked with making procurement and logistics more sustainable, specifically when it comes to providing humanitarian aid. As Procurement Project Officer for the UK's Humanitarian and Stabilisation Operations Team, she shares the steps her team is taking and considerations for others who rely on logistics to save lives.

Logistics – from transporting materials to storing goods for future use – creates 11 percent of global carbon dioxide emissions. For the humanitarian community (committed to the principle of 'do no harm'), this is a significant concern as the immediate procurement and delivery of supplies in the aftermath of a crisis can mean the difference between life and death. How can we ensure that saving lives doesn't mean harming the planet in the process?

For the UK's Humanitarian and Stabilisation Team (HSOT), the answer lies in overhauling the way we work and respond to crises globally, approaching the problem from four key perspectives.

### 1. IMPROVING THE SUSTAINABILITY OF PROCUREMENT

It's not always straightforward to apply sustainability principles to procurement. Initiatives that seem environmentally friendly may have unanticipated consequences for our carbon footprint or cause increased waste further down the line.

To encourage our team to change procurement approaches, we developed a guidance document explaining how to apply environmental considerations to our work.

## “How can we ensure that saving lives doesn't mean harming the planet in the process?”

Used together with an environmental review form, we're ensuring that the environment is at the forefront in every procurement request.

Each response begins with a Supply Chain Plan with a key focus on environmental impact, allowing us to support wider Foreign, Commonwealth, and Development Office (FCDO) priorities, such as the promotion of locally-sourced procurement. Through an analysis of regional procurement options, often prepared with partners (such as the NGO [Field Ready](#)), we can reduce the carbon footprint of our freight while empowering the local economy.

We are also working with our existing suppliers to reduce the amount of packaging used for non-food items (such as tents and water filters) while encouraging

the use of more environmentally-friendly packaging where possible.

As we supply goods to the UK government, we are in a privileged position to exercise some influence over our suppliers' environmental policies and procedures. As a result, we will be adding environmental criteria to due diligence assessments for suppliers with whom we spend over GBP 5,000. This will allow the development of a database of suppliers' environmental policies and encourage them to develop policies where they are missing.

### 2. CARBON OFFSETTING AND REDUCTION

Arranging and managing aircraft charters is one of the main areas of HSOT's procurement and logistics supply chain. As part of this arrangement, Palladium's air charter broker offers carbon offset credits through the [Carbon Trade Exchange \(CTX\)](#) for FCDO flights chartered by HSOT.

In June 2020, we arranged a charter to Bangladesh, which delivered oxygen generation equipment to the International Organisation for Migration (IOM) using 73,000kg of fuel. Air Charter Services offset based on the assumption that each kg

“As we supply goods to the UK government, we are in a privileged position to exercise some influence over our suppliers' environmental policies and procedures.”

of fuel burnt produced 3.3kg of carbon dioxide. As the Bangladesh flight was a part charter using 20 percent of the aircraft capacity, 48,100kg of carbon dioxide was offset through this mechanism. In August, we transported medical supplies to Beirut in response to the port explosion, burning 22,500kg of fuel and offsetting 74,250kg of carbon dioxide.

To reduce the carbon footprint of courier and freight movements, we are developing framework agreements for international freight forwarding and haulage with environmental considerations as a key focus of the tender process.

We've already awarded an agreement to international courier service [DPD](#) in light of their strong environmental policies and competitive pricing. For example, they aim to ensure that 10 percent of their fleet will be electric by 2021 and that all parcel deliveries are carbon neutral for no additional cost.

Part of our research during a response focuses on regional supply of surface freight so that we can offer alternatives to air charter to reduce our carbon footprint. For example, during the recent response to the Camp Moria fire in Greece, we offered a surface freight option as an alternative to air charter and trucked solar lanterns from the UK to Athens.

### 3. IMPROVING OVERALL ENERGY EFFICIENCY AND WATER CONSERVATION

We are focusing on improving the energy efficiency of our main operational base,

the UK Aid Disaster Response Centre in Kemble, UK. This includes leasing an electric forklift for stock handling and an electric car to act as the primary vehicle in our fleet and installing solar panels on the roof for a solar generator and battery charging station.

We are also creating a rainwater capture system, initially to flush the lavatories. If this is successful, we will investigate whether the rainwater can be filtered to a potable level to supply the warehouse's drinking water. LED bulbs will replace all lightbulbs, which use 75 percent less energy and last 25 times longer.

Our hope is to improve the green credentials of our standing operation through these adjustments.

### 4. REDUCTION OF WASTE SENT TO LANDFILL

A key focus for improving the Disaster Response Centre's sustainability has been reducing the amount of waste sent to landfill. We now receive monthly reports from the waste disposal company, demonstrating how the waste is disposed. Once a baseline is established, we will plan activities to maximise recycling and reuse.

Our procurement and logistics team have a strong track record in modifying pieces of equipment to increase their service life and utility, rather than disposing of them and purchasing new items. For example, we recently saved GBP 50,000 after refurbishing a heavy forklift that was repatriated from Mozambique when it was deployed for the Cyclone Idai response.

We are working closely with other HSOT team members to roll out further environmental initiatives, such as utilising only environmentally friendly office consumables and reducing the carbon footprint of deployments globally.

This will allow us to continue our mission to limit any negative environmental impact caused by the HSOT program and ensure that the work we're doing continues to be sustainable for both people and planet. ♻️



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## About The Catalyst

*The Catalyst* is Palladium's online publication, delivering news, perspectives, and in-depth reports from the front lines of our global work. Many of the stories are written by Palladium employees and partners, sharing their experiences and expertise as they work to solve the world's greatest challenges.

*The Catalyst* aims to inspire, educate, and embolden all readers, from experts in international development and C-Suite executives, to impact investors and community leaders.

## About Palladium

Palladium is a global impact firm, working at the intersection of social impact and commercial growth. For over 50 years, we've been helping our clients to see the world as interconnected – by formulating strategies, building partnerships, mobilising capital, and implementing programs that have a lasting social and financial impact. We simply call this "positive impact".

We work with corporations, governments, investors, communities, and civil society. With a global network operating in over 90 countries, Palladium is in the business of making the world a better place.

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