earthwatch learning

ROOTED IN NATURE

# The business case for biodiversity

Why it’s vital for your organisation to value nature

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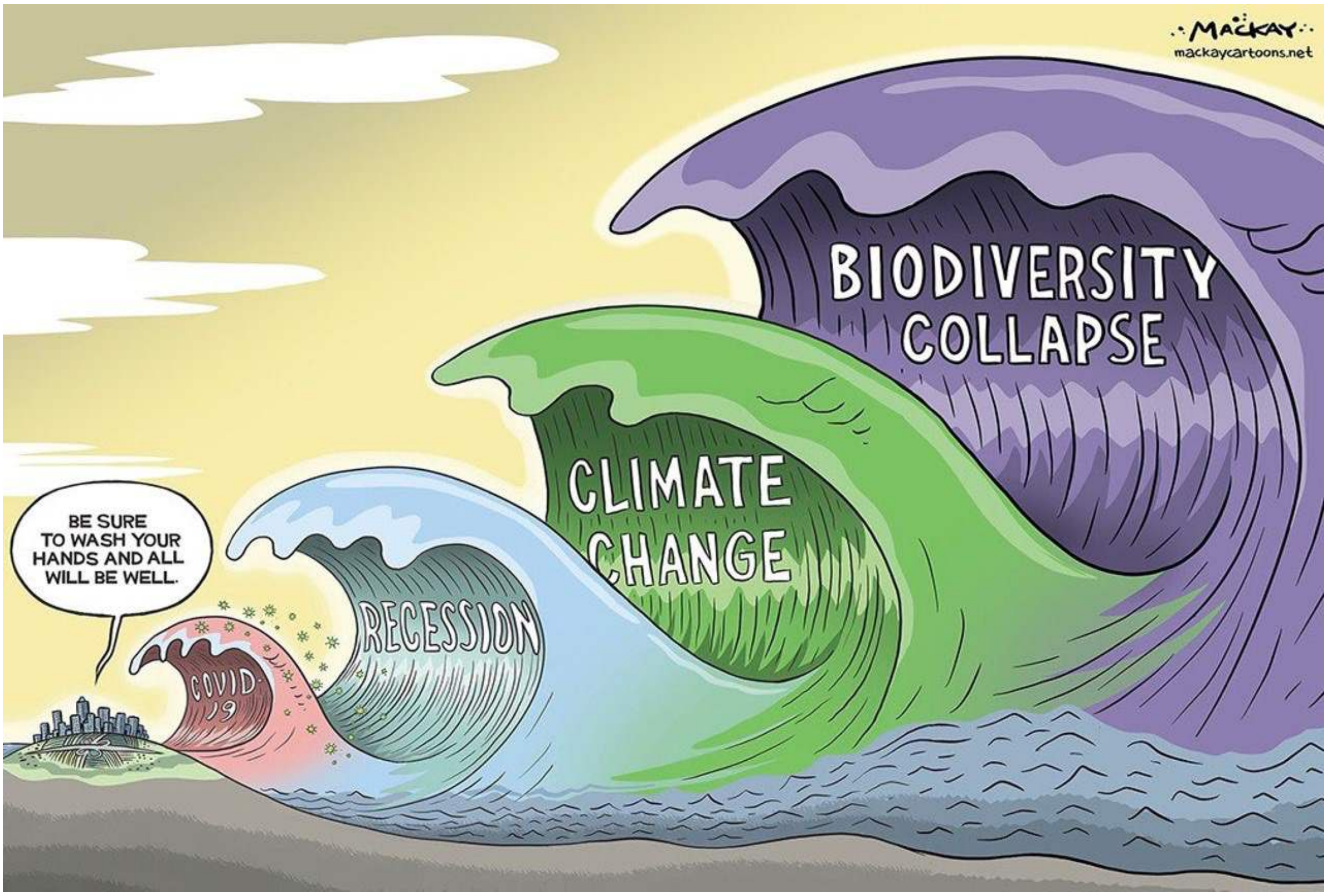
# Introduction

Climate change has, rightly, been on the agenda for some time now – although, arguably, not high enough. Less talked about is the other great catastrophe heading our way – that of biodiversity loss. This is now receiving far greater attention across the world and business community, but presents a far more complex and multi-layered challenge than climate change, where a seemingly simple metric of Net Zero by 2050 is the target.

From 7-19 December the 15th UN Biodiversity Conference Of The Parties (COP15) will take place in Montreal, Canada. It's imperative that COP15 agrees goals and targets to achieve its 2050 vision of 'Living in Harmony with Nature', and is seen the nature equivalent of the Paris Climate Agreement signed at the 21st Climate Change Conference (COP21) in 2015.

Many companies have only just begun to explore their impact on biodiversity loss and the impact of biodiversity collapse on their business. With only a small number of businesses having published credible biodiversity strategies, there is a lot of untapped opportunity to make organisations more robust and fit for the years to come. This paper provides an overview of the biodiversity crisis, and the business case for taking action now.




*Credit: Greame Mackay*

# Ecosystem services: why we depend on nature

Humans – whether as individual citizens or corporations – along with all the other organisms on Earth depend on the range of benefits called ecosystem services. Healthy ecosystems support life but they are under severe threat of collapsing. The recently published Living Planet Report[1] revealed that global wildlife populations have plunged by 69% on average since 1970. The report warns that 'the rich biodiversity that sustains all life on our planet is in crisis,  putting every species at risk – including us.' When we lose biodiversity – described as the variety of living organisms on Earth – we disrupt the processes governing the climate system, and this in turn affects Ecosystem Services.

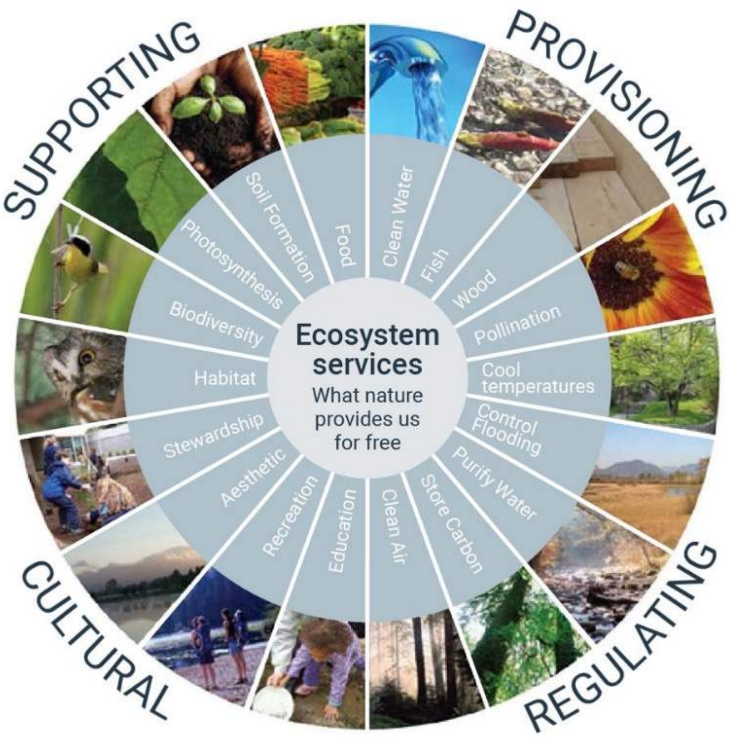
## Ecosystem services are grouped into four categories:

**Provisioning services** include for example pollination - birds, bees and other insects are estimated to be responsible for a third of the world's crop production. The soil is teeming with bacteria and microorganisms that are vital for liberating nutrients that plants need to grow, which are then also passed to us when we eat them. Ocean life is the main source of animal protein for many people. Many of our medicines, along with other complex chemicals that we use in our daily lives such as latex and rubber, also originate from plants.

**Regulating services** such as trees, bushes, wetlands and wild grasslands that naturally slow down water, help soil to absorb water, and provide shade from hot temperatures. When they are removed, it can increase flooding.

**Supporting services,** including trees and other plants, clean the air we breathe and help us tackle climate change by absorbing carbon dioxide, in exchange for oxygen that we need. Coral reefs and mangrove forests act as natural defences protecting coastlines from waves and storms.

**Cultural services** such as leisure, recreation and spiritual experiences in nature. We value nature in and of itself, and being in nature contributes to our wellbeing.




*"A staggering 20% of countries globally are at risk of their ecosystems collapsing due to a decline in biodiversity and related beneficial services."*

SwissRe, one of the largest reinsurers, and a linchpin of the global insurance industry.

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# Nature breakdown and biodiversity loss - the big six

Human activity, largely through business and industry, has already severely damaged our natural world. There are six pieces in this jigsaw that all have a profound effect on nature breakdown and biodiversity loss which, in turn, have deep and lasting impacts on the ability of the human race to thrive on this planet.

**Climate Change** – Global heating due to human activity puts us at risk of crossing crucial tipping points beyond which it may be impossible for nature to recover; including melting ice sheets, tree-borne diseases and bleaching of the Great Barrier Reef's coral cover.

**Protected green places** – Increased carbon emissions caused by human activity is increasingly destroying some of our most important safety nets – our forests, grasslands, wetlands.

**Agriculture** - Half the land on our planet is devoted to agriculture, largely to rear and feed livestock for human consumption. It is impossible to sustain a growing population eating meat at the same rate without converting more land. But this has serious and negative implications for biodiversity and the carbon sinks that provide a buffer to global heating.

**Changes in our oceans and ice** - Consequences of heating oceans include: sea level rise due to thermal expansion; more intense weather patterns due to warmer water vapour from the oceans; ocean acidification leading to coral bleaching affecting marine life; and the accelerated melting of the Earth's major ice sheets.

**Pollution** – Air, water and plastic pollution caused by humans are having a severe detrimental effect on our planet. According to the WHO, 1 in 10 deaths are attributable to air pollution caused by the burning of fossil fuels, and household pollution derived mostly from dirty cooking fuels inside homes in the developing world. Intensive farming methods, use of agrichemicals and pollution by sewage are a major source of freshwater pollution. The production of plastic uses around 8% of the world's oil production, yet only 9% of the plastic used is recycled. Plastic left in nature releases damaging toxins and causes severe threats for wildlife.

**Urbanisation** - Properly planned and managed urban expansion can support high levels of biodiversity if green and blue spaces are designed into them. However, in places where urbanisation is less likely to be planned, it can lead to urban sprawl, which is extremely damaging to nature. Where human habitats encroach on wildlife habitats, it leads to wildlife being displaced and competing for resources – both with us and other living organisms. Replacing green spaces with hard, impermeable surfaces such as roads leads to greater risk of flooding, as well as fragmenting natural habitats, creating barriers and leading to biodiversity being exposed and less connected.

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# The business case for protecting the natural world

Ecosystem services have given us an abundance of resources that have allowed many businesses to thrive. However, organisations often fail to place a true value on the ecosystem services which are depleted as a result of their operations.

When considering the impact of business practises on biodiversity, it is vital to look beyond the obvious direct impact of the business' operations, and explore all the ways in which it could be damaging to or protecting of nature. For example, by taking full responsibility for the impact of supply chains, indirect impacts of products, or buying policies that inadvertently, or even knowingly, encourage poor environmental practices.

**The following six areas of impact explain why it's vital for organisations to value nature, and place it at the heart of decision making.**

### 1) PROTECTING BIODIVERSITY IS GOOD FOR BUSINESS

While biodiversity considerations can seem difficult, they can lead to better outcomes and help make the value chain more resilient.

For example, a chemical company that values the river its operations depend on can take that value into account in capital decisions. Investing in the biodiversity of the areas surrounding the river can improve stakeholder confidence that the water is of the required quality, and available in the quantities the company needs to sustain its operations. At the same time, this can also lift the quality of life in local communities, help farms be more productive and enrich local ecosystems.

### 2) ABILITY TO ACCESS CAPITAL

As with climate change, it is likely that investors will act to get ahead of the regulatory curve to provide confidence that they are not exposed to stranded assets created by progressive biodiversity regulations. The difference is that, while it was a couple of decades before companies and markets took climate change risk seriously, the imperative to understand and mitigate against biodiversity risk could race ahead on an accelerated track.

Soon, capital could be diverted away from businesses that directly and indirectly cause adverse biodiversity impacts and into those that are "nature-positive." The CEO of the largest asset manager in the world – Larry Fink of BlackRock – already made the bold statement that any company that doesn't integrate sustainability into its strategy will no longer be recommended to investors; a potential divestment of around US$6 trillion.

### 3) OPERATIONAL RISKS

According to the World Economic Forum (WEF), more than half of the global gross domestic product depends on nature[2] and one in five companies could face significant operational risks as a result of collapsing ecosystems.[3] These material nature risks can typically be linked to the following:

**Dependency** - When a business is directly dependent on nature (ie, for fresh water, pollination or productive soils) as a part of its business model, it could impact its financial performance. For example, beverage companies should have a reliable supply of fresh water, food companies rely on the stability of crops and arable land, and biopharma companies rely on ecosystems to derive novel sources of medicines.

**Impact** - Where business activities are either directly or indirectly negatively impacting nature, this in turn can impact the business through reputational damage, legal action or financial losses. Increasingly, employees, consumers, investors, policymakers and communities are expecting companies to manage their biodiversity impact to preserve their social licence to operate.

### 4) KEEPING THE SOCIAL LICENCE TO OPERATE

Businesses operate under a social licence both with their customers and employees. Increasingly, climate impact is being considered as part of that social licence. Businesses that want to retain customers and attract and retain talent should be creating impactful sustainability strategies.

A recent report by First Insight found that a desire to help the environment was found to be the primary reason consumers purchase sustainable products and brands.[4] Previous studies showed that Millennials and Boomers define sustainability primarily by the materials used to create a product, whereas sustainability to Gen Z also means sustainable manufacturing. Risk also extends to attracting and retaining talent: in a study by Anthesis in 2021, 53% of the UK's workforce said sustainability is an important factor in choosing a company to work for.[5] Being ambitious with your sustainability strategy and aligning with consumer demands is simply better for business.

### 5) PHYSICAL, TRANSITION, AND DISRUPTION RISKS

Biodiversity risks share a number of common characteristics with climate change. Both are far-reaching in terms of breadth and magnitude, and contain tipping points beyond which it may be impossible to recover. They are both uncertain in their scale of impact yet they're also foreseeable, and are determined by short-term and longer-term actions.

**Physical risks** – These are damage to physical assets or the loss of ecosystem services necessary for production processes. An example of this is seen in China, where people are having to hand-pollinate apple and pear orchards because the wild bees have been eradicated by excessive pesticide use and a lack of natural habitat.[6]

**Transition risks** – These include policy changes, legal developments and technology changes. Key changes are likely to emerge from COP15 this December.

**Disruption risks** – These are risks where the loss or impact on nature disrupts societies or markets, such as the encroachment on natural habitats leading to the outbreak of a zoonotic disease.

### 6) MEANINGFUL MEASURING

The concept of climate change as a business risk is more mature and better understood than biodiversity collapse. Previously, climate change was viewed as an environmental externality, but this has shifted over the past decade to an environmental risk, and now a financial one. Biodiversity loss, being more recently recognised as a business risk, is behind climate change on this learning curve but is moving from the margins to the core of decision making much more quickly.

While it is relatively simple for companies to calculate carbon emissions, measuring biodiversity can be complex and multi-faceted. There are two key elements:

- Assessing the biodiversity value of ecosystems by measuring the number of endangered species or habitats.
- Using this assessment to measure the impact of your activities on biodiversity, such as the volume of pollinators to agriculture or ongoing clean river flows.

These can be measured at different levels, such as corporate, site and project levels.

When it comes to managing biodiversity risk, priority MUST be given to avoiding biodiversity loss, and offsets should only be considered as a last resort.

## The time to act is now

As the world transitions to a low-carbon economy, companies will be increasingly expected to demonstrate not just their decarbonisation strategies, but also how they are reducing negative impacts on (and ideally enhancing) biodiversity.

Whilst the transition to low and zero carbon economies is a significant change in how we must operate, **the reshaping of strategies and value chains to support biodiversity can be integrated into these changes**. Waiting to do so invariably makes the transition more complex and costly, rather than using it as an advantage. Organisations should work with their suppliers now to act on biodiversity across their value chain and help mitigate their impact.

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# Frameworks for change & COP15

The number of existing frameworks or those that are being developed can feel daunting when starting to measure your business' biodiversity impact. Here we have provided an overview of the key frameworks your organisation needs to consider – these frameworks can help businesses to quantify their impact on nature and take steps to maximise the opportunities they present.

TCFD TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

The TCFD was created in 2015 to develop a framework that would help organisations with consistent and transparent disclosure of climate-related risks and opportunities, and became mandatory in the UK from April 2022.

There are UK requirements for: all listed companies, banks or insurers with more than 500 employees; UK-based AIM companies with 500 or more employees; LLPs with 500 or more employees and a turnover of more than £500m, and non-listed companies with 500 employees or more and a turnover of more than £500m.[7]

TNFD Taskforce on Nature-related Financial Disclosures

The TNFD – consists of 34 individual Taskforce Members representing financial institutions, corporates and market service providers with US$19.4 trillion in assets.

The TNFD has recently launched their framework, which is designed to help businesses understand their biodiversity risks and opportunities, and how to disclose their performance.

SCIENCE BASED TARGETS
DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

Targets are only considered science-based if they are in line with what the latest climate science deems necessary to meet the goals of the Paris Agreement – limiting global heating to well-below 2°C above pre-industrial levels and pursuing efforts to limit warming to 1.5°C.

There are specific guides for more than 50 sectors Including all key transition sectors: Aluminium, Apparel, Aviation, Buildings, Cement, Chemicals, Financial, FLAG (Forest, Land, Agriculture), ICT, O&G, Power, Steel and Transport.

### THE IMPACT AND OPPORTUNITIES OF COP15

The new framework to be adopted at COP15 is the 'Post-2020 Framework'. This framework will be translated into regional and national policies and regulations that will have direct consequences on business operations. Stakeholders are calling for COP15 to announce the adoption of a global nature net-positive goal by 2030 and the full recovery of nature by 2050.

BUSINESS FOR NATURE SUMMARISES THE IMPACT ON BUSINESS AS FOLLOWS[8]:

*'Companies are currently operating in a distorted market that unintentionally rewards short-term profits over long-term value creation, meaning positive and circular actions can lead to extra short-term costs to companies.*

*The Post-2020 Framework has the potential to transform the economic and financial systems and ensure the creation of a level playing field for business where respecting our planetary boundaries becomes a competitive advantage in business models. This would unlock new business opportunities, incentivise companies to pursue trajectories that are positive for biodiversity, and help create a stable operating environment for business globally.'*

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# Case studies

## BRITVIC – INVESTING IN NATURE FOR BUSINESS RESILIENCE

Drinks producer Britvic joined the Rivers Trust's water stewardship programme in 2021 and recently invested into river and wetland restoration projects near two of its UK factories.

At both projects, Britvic staff will have the opportunity to volunteer and learn skills relating to habitat conservation and restoration from experts at the Rivers Trust. The firm's director of sustainable business, Sarah Webster, said about the partnership[9]:

*"As a leading soft drinks company, water is our most precious resource. We recognise our impact on water and partnering with The Rivers Trust allows us to work with experts to support vital projects in Great Britain to improve our waterways and in turn, support business resilience."*

Britvic has also developed a metric for including the "true cost" of water in business decision-making which they plan to use alongside their carbon impact assessment to support people, planet and performance decision-making throughout the business.

On their website, Britvic states their approach to sustainability as follows[10]:

*"We want to be a net positive contributor to the people and the world around us. This means ensuring our sustainable business practices, which we call Healthier People, Healthier Planet, are embedded in every element of our business strategy. We see this drive as fundamental to Britvic's resilience, to delivering the value our stakeholders deserve and to building a company of which we can all be proud."*

Britvic has set targets accredited by the Science Based Targets initiative (SBTi), it is publicly committed to reducing its operations emissions by 50% and its upstream and downstream emissions by 35% by 2025. Britvic has set the target of being carbon neutral by 2050.

## BNP PARIBAS – LIMITING DAMAGE TO NATURE, SUPPORTING ECOLOGICAL TRANSITION

BNP Paribas, an international banking group, has positioned itself as leader in sustainable finance. Its mission is "to contribute to a responsible and sustainable economy by financing and advising clients according to the highest ethical standards."

The company has integrated climate and biodiversity action across its operations and champions nature by supporting its clients in their own ecological transition and, having integrated climate and nature into its investment activities, offering sustainable financial solutions. As Sébastien Soleille, Global Head of Energy Transition and Environment, put it:

*"I believe that it is essential that banks contribute to the protection of ecosystems. To do this, they have two major levers of action: on the one hand, limit banking activities that have a negative impact on biodiversity and, on the other, support activities that, on the contrary, generate a positive impact on our environment."*[11]

BNP Paribas has deliberately structured its activities to limit the loss of natural capital, for example by providing financial products and services only to clients with a 'zero deforestation' strategy by 2025. And supporting the ecological transition to preserve biodiversity, for example by investing in start-ups committed to the ecological transition.

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# Next steps – using nature connection to embed lasting change

Supporting businesses to transition to net positivity – both in terms of greenhouse gases and impact on the natural world – is urgently required and absolutely critical for our very survival.

For more than three decades, Earthwatch has worked with global organisations to help them stay ahead of the curve and integrate sustainability into business strategy; ensuring their success is linked directly to the value creation that flows from how they manage their social and environmental impact.

Our experience shows that learning models that utilise the natural environment are the most effective way of both embedding sustainability into your business strategies, and translating existing strategies into tangible actions and results. Our learning philosophy is to bring people away from the office into a neutral and inspiring environment: to remove hierarchies and promote more cooperative behaviour across business culture, and to promote more creative thinking, viewing priorities differently, embracing diversity in all its forms, approaching tasks in a new way.

Our programmes demystify science, regulation and policy. By developing an understanding of the science behind the response to global challenges, participants can experience the interconnectedness of our natural system, society and economy. Through experiencing ourselves and our organisations as part of the wider system, our responses also tend to be connected to our stakeholders and wider society. This drives creative and innovative problem solving and solutions, that align commercial advantage with planetary health.

**If you'd like to explore how Earthwatch can support your organisation's sustainability goals in the lead-up to COP15 and beyond, please get in touch.**

# Meet the Earthwatch team

## Our learning programmes are conducted by experts in their field and enable you to quickly upskill your team or organisation

### Abi Jermain

Senior Learning Manager

Abi has consulted on, designed and delivered a wide variety of experiential learning programmes for partners such as HSBC, Shell, Microsoft and DHL. Through her design work Abi embraces the opportunity that Earthwatch programmes allow, blending knowledge sharing, reflection, networking and coaching towards action. Abi has trained as a co-active coach and Action Learning facilitator and co-leads a team of learning managers.

### Scott Bearman-Brown

Senior Learning Manager

Scott co-leads on the design and delivery of leadership, coaching and experiential learning programmes for Earthwatch's Corporate Partnerships. Scott has spent 18 years consulting on senior leadership development, facilitation, coaching, strategy workshops and team engagement with clients such as HSBC, Metro Bank, BMW, Manchester United, Thames Water, as well as global leaders in travel, aviation, utilities and education. Over the last seven years he has focussed primarily on sustainability leadership. Scott is an accredited Insights® Practitioner and coach and holds a distinction in Learning Practice from the CIPD.

### Lene Bryant

Learning Manager

Lene designs and delivers online and in-person experiential learning programmes for our corporate partners such as HSBC and Shell. She has a background in learning and development management and delivery, teaching, and organisational culture and change, as well as being close to completion of a Masters in Climate Change & Development. She enjoys taking a systems perspective in her learning work on the climate and biodiversity crisis, and believes in the power of experiences in nature for everybody on Earthwatch programmes.

Earthwatch works with business partners to design and deliver transformational sustainability approaches, grounded in immersive experiences and dynamic learning techniques that draw on science and are rooted in nature.

Earthwatch Learning actively engages employees at all levels of an organisation in the understanding and action needed to bring about profound change in their business and meet sustainability goals.

See your business in a new light. Explore our Earthwatch Learning offer on our website **learning.earthwatch.org.uk** and get in touch to speak to us about what Earthwatch Learning can do for you by emailing **development@earthwatch.org.uk**

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# Further reading


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