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BETTER BUSINESS FOR NATURE

NATURE-BASED SOLUTIONS TOOLKIT FOR BUSINESSES

east midlands chamber
Derbyshire | Leicestershire | Nottinghamshire

Derbyshire Wildlife Trust

SPECIES SURVIVAL FUND
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PARTNERING FOR NATURE

Derbyshire Wildlife Trust, in partnership with **the University of Derby** and **the Chamber,** has launched a project that seeks to understand barriers and enablers of policy and business engagement with the nature-based solutions (NbS).

Better Business4Nature project developed this toolkit for businesses and policymakers to boost nature economy in the region. Case studies illustrating the uptake of the nature-based solutions and contribution of regional businesses to Biodiversity Net Gain are also produced as part of the project.

The project aims to inspire innovation and leadership of local businesses to build NbS capacity in the region.

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WHAT ARE NATURE BASED SOLUTIONS?

Nature-based Solutions (NbS) are actions that protect, sustainably manage, or restore ecosystems to address societal challenges that benefit both human well-being and biodiversity. These solutions harness natural processes to tackle issues such as climate change, disaster risk, and water security.

01 ECOSYSTEM RESTORATION

Means assisting in the recovery of ecosystems that have been degraded or destroyed, as well as conserving the ecosystems that are still intact. Healthier ecosystems, with richer biodiversity, yield greater benefits such as more fertile soils, bigger yields of timber and fish, and larger stores of greenhouse gases.

02 GREEN INFRASTRUCTURE

Is a sustainable building approach that prioritises environmental considerations, energy efficiency, and the use of renewable resources in design and construction. For example bringing natural elements like green roofs and walls into urban or office settings.

03 SUSTAINABLE LAND MANAGEMENT

The United Nations defines sustainable land management (SLM) as *"the use of land resources, including soils, water, animals and plants, for the production of goods to meet changing human needs, while simultaneously ensuring the long-term productive potential of these resources and the maintenance of their environmental functions".*

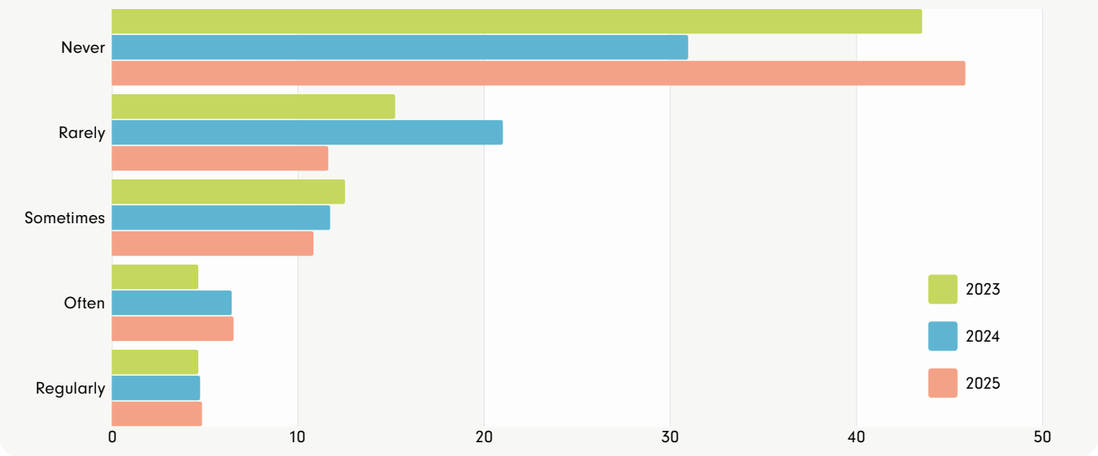
04 ETHICAL SUPPLY CHAINS

Evaluating supply chains and seeking to minimise environmental impact by waste reduction, improved energy efficiency and the use of sustainable suppliers.

BUSINESS ENGAGEMENT WITH NBS

Studies of business engagement with NbS showed low levels of awareness and low levels of engagement from businesses of different sizes and operating in various sectors. For example, just under 5% of businesses in the East Midlands reported to engage regularly with NbS over the last three years. Over 45% of regional businesses have never engaged with NbS, and 12% rarely engaged with NbS in 2025 (Figure 1).

Figure 1: Business engagement with NbS in the East Midlands, 2023–25 (Baranova, 2025)



To reflect a varying levels of NbS engagement, we developed the following typology of businesses which will be used throughout this toolkit:

NBS NEWCOMER – These businesses either have never considered and/or engaged with NbS or are at a very early stage of NbS exploration. They might have experience of one-off NbS projects of a low scale and impact.

NBS SUPPORTER – These businesses have considered and engaged with NbS often or from time to time. They develop plans and act on NbS opportunities in a systematic and largely operational way.

NBS CHAMPION – These businesses engage regularly with NbS; they champion NbS activities and lead in their respective markets and sectors by supporting nature with strong integration of NbS in the overall business strategy.

WHY BUSINESSES SHOULD GET INVOLVED IN THE UPTAKE OF NBS?

OPPORTUNITY

What is the purpose of the business? If the answer lies in delivering economic outcomes in a form of profit or share price performance only, then the role of business in society is limited and no longer fit for the future.

National and regional policy on economic growth declare commitment to clean and inclusive growth (DESNZ and DBEIS, 2017, EMCCA 2025). Businesses need to balance delivering economic growth, environmental impact and social responsibility for them to fully support sustainability transition. Although an increasing number of businesses adopt environmental impact minimisation to running of the day-to-day business and strategically, such an approach would need to move to ***ecological impact enrichment.*** This means improved understanding of the relationship between your business and nature and active engagement with nature-based solutions.

KEY TERMS:

Business purpose,
Sustainability transition,
Environmental impact minimisation,
Ecological impact enrichment approach

ECOLOGICAL IMPACT ENRICHMENT APPROACH

The Ecological Impact Enrichment (EIE) approach supports delivery of the positive ecological outcomes through a balanced approach towards nature-societal-organisational interactions and benefits. EIE approach targets contribution to the following areas; but not exclusive to, biodiversity net gain, ecological conservancy, water preservation, zero waste, sustainability by design, carbon neutrality (Baranova et al., 2021). It also has a strong potential for contributing towards the Sustainable Development Goals (SDGs) (UN, 2015).

This approach requires a shift in organisational values concerning the role of business in society and nature-organisation interactions from a perspective of minimising environmental impacts to enriching ecological gains. EIE adoption requires appropriate systems, skills and strategies to support delivery of its ambitions. It responds to the limitations of the Environmental Impact Minimisation (EIM) approach.

KEY FACT:

JUST UNDER 5% OF BUSINESS HAVE REGULARLY ENGAGED WITH NATURE-BASED SOLUTIONS ACCORDING TO THE LATEST GREEN GROWTH TRENDS IN THE EAST MIDLANDS REPORT (2025).

BETTER BUSINESS FOR NATURE

The EIE approach aligns strongly with capacity building for Biodiversity Net Gain (BNG). According to Defra, BNG is an approach to development which makes sure that habitats for wildlife are left in a measurably better state than they were before the development (Derfa, 2023). Businesses that commit to BNG are actively supporting interventions that enrich ecological impact of proactive environmental strategies.

Table 1: Comparison between EIM and EIE approaches

CHARACTERISTIC	ENVIRONMENTAL IMPACT MINIMISATION (EIM)	ECOLOGICAL IMPACT ENRICHMENT (EIE)
Shared values	Reducing impact on environment	Enhancing biodiversity and generating positive impact on nature
Growth Strategy	Growth through managing operations and supply chains with a focus on low carbon footprint	Growth in tune with acting for nature
Systems and processes	Designed to deliver the least impact on environment	Designed to deliver a positive impact on environment
Leadership and management	Focused on championing low carbon business model transformation	Focused on championing business model transformation to maximise ecological enrichment
Skills	Key skills to deliver EIM include carbon management, environmental management and strategy	In addition to EIM skills, biodiversity net gain, nature-based solutions, climate adaptation and ecological improvement
Inter-organisational relations	Built around delivering Scope 1, 2 and 3 carbon emission reduction – mainly across business and throughout supply chain	Built around delivering biodiversity net gain and thus include a wide range of partners including local community, NbS specialists, research and academic communities
Staff	Predominantly with technical and STEM expertise to deliver EIM	With skills to reach out and work with a diverse group of experts from natural science backgrounds

WHAT BUSINESSES SAY

Supporting local nature has a positive impact on day-to-day quality of life and sense of place for people who live locally. **– Lubrizol**

Nature based solutions help to 'kick start nature', thereby enabling nature to provide solutions to environmental problems: *"That natural process will provide a solution to a problem with flooding; it will capture some carbon; it will provide huge benefits to health and well-being just by being in the outdoors."* **– Derby City Council**.

Understanding your land and how it enriches local nature and community is *"Rewarding because it safeguards both your land and the wider surrounding landscape from environmental damage."* **– Dale Grange Farm**.

REFERENCES:

Baranova (2025) Green Growth Trends in the East Midlands 2025, University of Derby.

Baranova, P., Horry, R. and Booth, C., 2021, September. To Infinity and Beyond the Environmental Impact Minimisation Paradigm. In International Conference of Sustainable Ecological Engineering Design for Society (pp. 3-16). Cham: Springer Nature Switzerland.

UN (2015) United Nations (2015) Transforming our World: The 2030 Agenda for Sustainable Development. United Nations 2015 https://sustainabledevelopment.un.org/post2015/transformingourworld/publication

Defra (2023) Understanding biodiversity net gain, Guidance, Department for Environment, Food and Riral Affairs, Gov UK, https://www.gov.uk/guidance/understanding-biodiversity-net-gain

HELPFUL RESOURCES AND SUPPORT:

Biodiversity Net Gain with The Wildlife Trusts – https://www.wildlifetrusts.org/nature-based-solutions/biodiversity-net-gain

Biodiversity Net Gain – *Principles and Guidance for UK Construction and Developments from CEEM.* https://cieem.net/i-am/biodiversity-enhancement-approaches/biodiversity-net-gain/

Natural England – *Biodiversity net gain: where to start (blog series)* https://naturalengland.blog.gov.uk/2024/01/29/biodiversity-net-gain-where-to-start/

GLOSSARY:

Strategic purpose – most organisations claim for themselves a particular purpose, as encapsulated in their vision, mission and strategic objectives. The strategic purpose is a key criterion against which strategies must be evaluated (Johnson et al., 2011).

Sustainability transition – refers to systemic changes needed in societies to move away from unsustainable practices that harm the environment and towards those that are ecologically sound and socially equitable.

Environmental Impact Minimisation (EIM) – an approach to managing human-nature relationship by identifying environmental areas and risks, and putting interventions in place to minimise the environmental impact of the areas and the associated risks.

Ecological Impact Enrichment (EIE) – an approach which supports delivery of the ecological outcomes through a balanced approach for nature-societal-organisational interactions and benefits.

Biodiversity Net Gain (BNG) – is a way of creating and improving natural habitats. BNG makes sure development has a measurably positive impact ('net gain') on biodiversity, compared to what was there before development.

OPPORTUNITY 1

ENHANCING SITE BIODIVERSITY

OPPORTUNITY

In addition to playing a part in reversing biodiversity decline, enhancing biodiversity on your site can deliver practical business benefits backed by evidence. Businesses of all types and sizes can benefit through the enhancement of biodiversity both on-site and off-site. Restoring and protecting natural features such as trees, habitats and green spaces on-site can help manage climate risks like flooding and heat – and studies of green infrastructure show that these nature-based approaches can reduce costs compared with conventional "grey" solutions by lowering stormwater and energy expenses.

Evidence from corporate research indicates that bringing biodiversity considerations into planning and asset decisions can increase property values and improve operational confidence, as well as support long-term resilience (EY,2022). Moreover, companies that invest in nature are often seen as responsible and forward thinking by customers and investors, strengthening brand value in a market where environmental performance increasingly shapes buying and procurement decisions (Theocharis, 2025; Strategyzer, 2020). By restoring biodiversity, businesses invest in nature-rich landscapes that provide vital ecosystem services such as clean water, healthy soils, and improved public health.

KEY TERMS:

Biodiversity assessment

KEY FACT:

ACROSS THE UK, THE SPECIES STUDIED HAVE DECLINED ON AVERAGE BY ABOUT 19% SINCE 1970, AND NEARLY 1 IN 6 SPECIES (AROUND 16%) ARE NOW AT RISK OF BEING LOST FROM GREAT BRITAIN (STATE OF NATURE REPORT, 2023).

NATURE ON YOUR BUSINESS SITE

How and where biodiversity can be enhanced on your site will depend on factors such as site size, existing habitats, surrounding land use and local ecological priorities. Urban premises with limited space may focus on measures such as green roofs, green walls, native planting or pollinator-friendly landscaping, while larger or semi-rural sites may have opportunities to create habitats such as ponds, wildflower meadows, hedgerows or woodland buffers. The ecological value and feasibility of different interventions will vary depending on soil conditions, existing species and connectivity to nearby green spaces.

Before investing, businesses are encouraged to undertake a site-specific ecological assessment. The Wildlife Trusts and other qualified ecologists can provide biodiversity surveys, habitat assessments and species audits to establish a baseline and identify priority actions. These surveys can highlight protected species considerations, opportunities to enhance habitat connectivity and practical steps to support local biodiversity. Taking this informed approach helps ensure that biodiversity enhancements are targeted, legally compliant and aligned with local nature recovery priorities, while delivering visible environmental and reputational benefits for the business.

INTERVENTIONS TO INCREASE BIODIVERSITY ON YOUR BUSINESS SITE

NBS NEWCOMER

- Pollinator planting in planters and beds (flower-rich species; seasonal continuity).
- Native hedging in boundaries / verges (improves connectivity and food / shelter).
- Reduce mowing intensity + cut-and-collect on suitable grass areas to increase flowers.
- Habitat features: log piles / deadwood habitat in quiet corners (where safe), plus targeted bird/insect boxes (small but useful).

NBS SUPPORTER

- Wildflower meadows / flower-rich grassland in underused corners (correct low-nutrient establishment + annual management).
- Biodiverse ('brown') roofs / habitat roofs designed to recreate lost habitat in urban areas.
- Green roofs (extensive) with diverse planting beyond sedum-only systems.
- Rain gardens/wetlands with wildlife-friendly planting (dual benefit: water + habitat).
- Wildlife-sensitive lighting (reduce disturbance; design that's compatible with biodiversity goals).

NBS CHAMPION

- Habitat mosaics (trees + meadow + wet features + deadwood + shrub layers) to support more species and resilience.
- Connectivity / corridors: link boundaries/greenspaces so habitats aren't isolated (hedge / tree 'stepping stones').
- Off-site nature recovery where on-site space is constrained (e.g. fund / partner on restoration projects with local organisations).

OPPORTUNITY 1: ENHANCING SITE BIODIVERSITY

Some of the NbS activities can be complex and some are straightforward. It is advisable to engage with NbS professionals in your area to identify the best way forward. Depending on your readiness, here are examples of NbS you might wish to consider.

BUSINESS SITE INFRASTRUCTURE	NBS NEWCOMER	NBS SUPPORTER	NBS CHAMPION
Roof	• Small biodiversity roof features or trays (where safe)	• Biodiverse / brown roofs with varied substrates	
Building sides	• Flowering climbers on façades • Bird Boxes	• Structured green façades with nesting / roosting features • Swift bricks	
Verges and boundaries	• Native hedge planting (even short sections) • Insect boxes • Hedgehog openings in fences	• Hedgerow trees and layered planting • Buffer Strips of long grass / wildflowers	• Habitat corridors linking to wider green networks
Courtyard and frontages	• Pollinator-friendly planters	• Wildlife-designed rain gardens	• Courtyard habitat mosaics (trees, shrubs, grass, wet features)
Larger open space or spare corners	• Reduced mowing / cut-and-collect regimes • Dead wood / brush / stone habitat piles	• Wildflower meadows (correct low-nutrient setup) • Small wildlife ponds	• Ponds, wetlands, or semi-natural habitat mosaics
Site-level		• Wildlife-sensitive lighting	• Biodiversity Enhancement Plan, undertaken by ecologists or Wildlife Trusts

GLOSSARY:

Biodiversity assessment – is a systematic process used to evaluate and document the variety of life forms in a given area, including species richness, abundance, and distribution.

REFERENCES:

EY (2022). Businesses should act now to measure and mitigate their impact on biodiversity. Newsletter, Issued April 2022, accessible through https://www.ey.com/en_uk/insights/assurance/why-biodiversity-may-be-more-important-to-your-business-than-you-realize?

Strategyzer (2020) How Unilever aligns its portfolio actions with its long term vision for the future, News article publishes in October 20220, accessible through https://www.strategyzer.com/library/how-unilever-aligns-its-portfolio-actions-with-its-long-term-vision-for-the-future?

Theocharis, D. and Tsekouropoulos, G., 2025. Sustainable consumption and branding for Gen Z: How brand dimensions influence consumer behaviour and adoption of newly launched technological products. Sustainability, 17(9), p.4124.

HELPFUL RESOURCES AND SUPPORT:

MAGIC *– geographical mapping platform that can provide spatial information on the natural environment.*

Derbyshire Biological Record Centre *– collects and combines vital data on species across the county.*

NAAC Contracting prices survey *– agricultural budgeting resource that details sources of standard costs for land-based interventions.*

The Environmental Benefits from Nature Tool *– designed to assess and quantify improvements to ecosystem services from land use change.*

Derbyshire Local Nature Recovery Strategy (LNRS) *– sets out local biodiversity priorities and actions for nature recovery within the county.*

LNRS Local Habitat Map *– spatial tool identifying priority areas for habitat restoration and recovery within Derbyshire.*

RHS Plants for Pollinators *– Guide to best plants and practices for increasing pollinator populations on your land.*

OPPORTUNITY 2

BUILD RESILIENCE TO CLIMATE CHANGE – WATER MANAGEMENT

OPPORTUNITY

Using NbS to manage water offers businesses and communities a range of proven environmental and risk-reduction benefits. NbS such as sustainable drainage systems (SuDS), natural flood management features and green infrastructure work with natural processes to slow, store and absorb excess water, helping to reduce the risk and severity of flooding, particularly from heavy rainfall and surface water runoff. Evidence-based programmes and government position statements in the UK note that such approaches can increase resilience to floods and coastal erosion by slowing or storing flood water, reducing sediment loading and dissipating energy, while also improving water quality by reducing runoff and filtering pollutants. These interventions also support wider biodiversity and ecosystem recovery, create more attractive and healthy environments, and can complement traditional 'grey' infrastructure by reducing pressure on conventional drainage systems. By integrating NbS into site and landscape planning, businesses can help mitigate water-related risks, contribute to regulatory and stakeholder expectations around environmental performance, and deliver co-benefits for nature, employees and local communities.

KEY TERMS:

Flood management,
Sustainable drainage system,
Water management

KEY FACT:

ACROSS ENGLAND, 6.3 MILLION PROPERTIES ARE CURRENTLY AT RISK OF FLOODING FROM RIVERS, THE SEA OR SURFACE WATER, AND THIS NUMBER COULD RISE TO AROUND 8 MILLION – ROUGHLY ONE IN FOUR PROPERTIES – BY THE MIDDLE OF THE CENTURY DUE TO CLIMATE CHANGE (ENVIRONMENT AGENCY, 2024)

WATER AND YOUR BUSINESS

Nature-based Solutions can be used to manage water; these approaches vary significantly from businesses to business. The suitability and value of different interventions depend on factors such as your site's location, topography, soil type, existing drainage infrastructure and proximity to rivers or surface water flood pathways. Businesses located in areas at higher risk of river, coastal or surface water flooding may see greater benefits from interventions such as sustainable drainage systems (SuDS), rain gardens, permeable surfaces or on-site attenuation features Conversely, sites in lower-risk areas may prioritise water efficiency, runoff reduction or water quality improvements.

Because flood risk and drainage capacity differ from place to place, carrying out a site-specific assessment is essential before investing in NbS. Businesses can seek advice from qualified flood risk consultants, drainage engineers, landscape architects or local authority planning and flood teams. Publicly available resources – such as flood risk maps provided by the Environment Agency (for England) – can help provide an initial understanding of exposure. Professional advisers can then assess your site conditions, identify feasible NbS interventions and provide cost estimates to support a clear cost-benefit analysis.

WATER MANAGEMENT INTERVENTIONS

NBS NEWCOMER

- Downpipe disconnection into planted planters / micro-rain gardens (with safe overflow back to drain).
- Rainwater butts / small rainwater harvesting for irrigation & cleaning.
- Depave small areas (remove unnecessary hardstanding; replace with planting or permeable ground).
- Infiltration planters / 'stormwater planters' at entrances and courtyards.
- Filter strips / vegetated verges to slow and clean runoff from small, paved areas.

NBS SUPPORTER

- Rain gardens / bioretention beds along car parks and building edges.
- Swales / bioswales (shallow, vegetated channels that convey + infiltrate water).
- Tree pits designed for stormwater (connected soil volumes that accept runoff).
- Permeable paving (partial resurfacing) in flood/puddle hotspots (paired with silt control + maintenance).
- Green roofs as source control (reduce and slow roof runoff).

NBS CHAMPION

- Blue roofs (temporary storage on roofs; controlled release).
- Blue-green roofs (storage + vegetation for attenuation + evapotranspiration).
- Permeable car park resurfacing (whole area) with sub-base storage and infiltration/underdrain strategy.
- Detention basins / retention ponds / constructed wetlands (where space allows; strong water quality + habitat benefits).
- Off-site natural flood management / 'working with natural processes' in the wider catchment (e.g. wetland restoration, floodplain reconnection) through partnerships where on-site space is limited.

OPPORTUNITY 2: BUILDING RESILIENCE TO CLIMATE CHANGE – WATER MANAGEMENT

Some of the NbS activities can be complex and some are straightforward. It is advisable to engage with NbS professionals in your area to identify the best way forward. Depending on your readiness, here are examples of NbS you might wish to consider.

BUSINESS SITE INFRASTRUCTURE	NBS NEWCOMER	NBS SUPPORTER	NBS CHAMPION
Roof	• Downpipe disconnection into planters / rain gardens • Green roof modular trays	• Green roofs for rainfall interception	• Blue-Green roofs for interceptions + storage
Car park & hardstanding	• Permeable patches where puddling occur • Deprave small areas – replace unnecessary hardstanding with planting permeable ground	• Raingarden parking islands	• Fully permeable resurfacing with sub-base storage
Verges and boundaries	• Vegetated verges to slow and clean runoff from paved areas	• Swales/Bioswales along edges or access roads	• Linked 'treatment trains' (planter -> rain garden -> swale)
Courtyard and frontages	• Channel downpipe into SlowFlo / infiltration planters to slow water flow	• Rain gardens or bioretention beds along car parks and building edges	• Linked 'treatment trains' (planter -> rain garden -> swale)
Larger open space or spare corners	• Depave & replants unused corners	• Landscape basins / dry detention areas	• Ponds, wetlands
Off-site			• Investing in upper catchment Natural Flood Management (NFM) projects

GLOSSARY:

Biodiversity assessment – is a systematic process used to evaluate and document the variety of life forms in a given area, including species richness, abundance, and distribution.

REFERENCES:

Environmental Agency (2024) Environment Agency publishes major update to national flood and coastal erosion risk assessment, Press release on 17 of December 2024, accessible through https://www.gov.uk/government/news/environment-agency-publishes-major-update-to-national-flood-and-coastal-erosion-risk-assessment?

HELPFUL RESOURCES AND SUPPORT:

CaBA Data Explorer *– Collection of databases supporting organisations to deliver integrated catchment management.*

Working with natural processes to reduce flood risk *– Handbook produced by the Flood and Coastal Erosion Risk Management Research and Development Programme and Environment Agency.*

Check the long term flood risk for an area in England *– Government resource for assessing local flood risk based on address.*

Natural England Green Infrastructure Framework *– Standards defining best green infrastructure practices for local planners, developers, parks and green managers, and communities.*

Susdrain *– community resource website for best sustainable drainage systems (SuDs) practices and case-studies.*

OPPORTUNITY 3

BUILD RESILIENCE TO CLIMATE CHANGE – TEMPERATURE CONTROL

OPPORTUNITY

Nature-Based Solutions (NbS) such as urban trees, green roofs, green walls and vegetated spaces can play an important role in reducing heat exposure and improving thermal comfort for businesses. Evidence from the Climate Change Committee highlights that overheating in buildings is already affecting health, wellbeing and productivity, and that these impacts are projected to increase significantly without further adaptation. Urban greening is recognised by the Environment Agency and other UK bodies as an effective way to mitigate urban heat through shading and evapotranspiration, helping to lower ambient temperatures and reduce heat stress. Studies reviewed by the International Union for Conservation of Nature and the Intergovernmental Panel on Climate Change identify urban vegetation as a cost-effective adaptation measure that can complement mechanical cooling, reduce reliance on air conditioning and deliver co-benefits including improved air quality, biodiversity enhancement and enhanced employee wellbeing. For businesses, integrating NbS into site design and retrofits can therefore contribute to maintaining workforce comfort and productivity during hotter summers, while strengthening long-term climate resilience and environmental performance.

KEY TERMS:

Climate change risks, Temperature rise, Heat stress, Extreme weather

KEY FACT:

RESEARCH SHOWS THAT HEAT AND HUMIDITY IN WORKPLACES DIRECTLY REDUCE EMPLOYEE PRODUCTIVITY AND WELLBEING, LEADING TO REDUCED WORK INTENSITY, MORE BREAKS AND LOWER PERFORMANCE. HEAT TYPICALLY CAUSES WORKERS TO SLOW THEIR PACE AND TAKE MORE FREQUENT BREAKS TO COPE WITH DISCOMFORT AND STRESS, PARTICULARLY IN HOT INDOOR OR OUTDOOR CONDITIONS (CLIMATE CHANGE COMMITTEE, 2022).

TEMPERATURE RISE AND YOUR BUSINESS

Temperature rise significantly impacts businesses in variety of ways. Some of the examples include:

Operational challenges: businesses may face challenges due to high energy costs, low productivity levels, and increased insurance premiums associated with climate-related risks.

Supply-chain disruptions: extreme weather can cause supply chain disruptions, affecting availability of materials and products, which could lead to operational inefficiencies.

Consumer behaviour: as awareness of sustainability grows, consumers are increasingly looking for eco-friendly products which could influence business strategies and product offering.

Regulatory challenges: businesses may need to adopt to new regulations aimed at reducing emissions and addressing climate change risks.

Extreme weather conditions: increase in temperature is linked to more frequent and severe extreme weather events, such as heatwaves and wildfires, which can disrupt operations, pose risk to infrastructure and have negative impact on health and safety of employees, customers and local communities.

TEMPERATURE CONTROL INTERVENTIONS

NBS NEWCOMER

- Shade planting (trees or large planters) in the hottest parts of the site (west / south hardstanding, entrances, seating).
- Green façades (climbers on trellis/cables) to shade walls and cool air.
- Add small 'cool spots' – planted seating, shaded break areas, courtyard planters.
- Reduce hard surface dominance in small strips (swap spare paving for planting / permeable ground).

NBS SUPPORTER

- Green roofs (evapotranspiration + insulation reduce heat gain, also cool roof microclimate).
- Biosolar roofs (vegetation cools the roof microclimate and can improve solar photovoltaic panels PV performance via evaporative cooling).
- Tree-led retrofit: add continuous soil volumes / linked pits so trees survive drought and provide reliable shade cooling.
- Convert small paved courtyards into planted courtyards (shade + evapotranspiration).

NBS CHAMPION

- Blue roofs (temporary storage on roofs; controlled release).
- Blue-green roofs (storage + vegetation for attenuation + evapotranspiration).
- Permeable car park resurfacing (whole area) with sub-base storage and infiltration/underdrain strategy.
- Detention basins / retention ponds / constructed wetlands (where space allows; strong water quality + habitat benefits).
- Off-site natural flood management / 'working with natural processes' in the wider catchment (e.g. wetland restoration, floodplain reconnection) through partnerships where on-site space is limited.

OPPORTUNITY 3: BUILDING RESILIENCE TO CLIMATE CHANGE – WATER MANAGEMENT

TEMPERATURE CONTROL INTERVENTIONS

BUSINESS SITE NATURE	NBS NEWCOMER	NBS SUPPORTER	NBS CHAMPION
Roof	• Small green roof areas on extensions or outbuildings	• Extensive green roofs (cooling + insulation)	• Biosolar roofs (PV + vegetation cooling the roof microclimate)
Building sides / façades	• Green façades (climbers on trellis or cables)	• Diverse green wall systems, including planted tree	• Large-scale façade greening across elevations
Car parks & hardstanding	• Tree planters near entrances or pedestrian routes	• Tree pits with continuous soil volumes	• Tree-led redesign of parking layouts (maximise canopy cover)
Courtyard & staff areas	• Greened seating and shaded break areas	• Courtyard retrofits replacing paving with planting	• Pocket parks / green courtyards replacing hardstanding
Verges and open spaces	• Plant shade trees in hottest locations	• Green corridor strips linking shaded areas	• Estate-scale canopy and cooling strategy

GLOSSARY:

Heat stress – occurs when the body cannot regulate its internal temperature, potentially leading to heat-related illnesses such as heat exhaustion and heat stroke.

REFERENCES:

Climate Change Committee (2022) Risks to health, wellbeing and productivity from overheating in buildings, Report, July 2022, accessed 14.02.26 through: https://www.theccc.org.uk/wp-content/uploads/2022/07/Risks-to-health-wellbeing-and-productivity-from-overheating-in-buildings.pdf

HELPFUL RESOURCES AND SUPPORT:

Temperature in the workplace – *Health and Safety Executive.*
Compounding climate challenges for UK businesses – *Met Office, UK.*
Strategies to make your business more resilient to extreme heat – *IBM Institute.*

OPPORTUNITY 4

CARBON OFFSETTING

OPPORTUNITY

Carbon offsetting is a mechanism that allows a company to compensate for unavoidable emissions by investing in verified projects that reduce or remove an equivalent amount of greenhouse gases elsewhere. Carbon offsetting is a useful tool for achieving net zero which helps mitigate climate change but also can strengthen a business's competitiveness, resilience and attractiveness to customers, investors and employees, particularly as climate transparency and emissions reporting become embedded in procurement and supply chain requirements. However, credible net zero strategies follow the mitigation hierarchy: first avoiding emissions where possible, then reducing them through efficiency and operational change, before substituting high-carbon activities and only then offsetting residual emissions that cannot currently be eliminated.

KEY TERMS:
Carbon Offset

KEY FACT:
A GLOBAL SURVEY OF 22,856 GEN-Z AND MILLENNIAL RESPONDENTS FOUND THAT MORE THAN HALF ASSESS AN EMPLOYER'S ENVIRONMENTAL IMPACT AND CLIMATE POLICIES BEFORE ACCEPTING A ROLE. ONE IN SIX HAVE ALREADY CHANGED JOBS OR SECTORS DUE TO CLIMATE CONCERNS, AND APPROXIMATELY A QUARTER INTEND TO DO SO IN THE FUTURE, HIGHLIGHTING THE GROWING INFLUENCE OF CLIMATE ACTION ON TALENT ATTRACTION AND RETENTION (DELOITTE, 2023).

CARBON OFFSETTING INTERVENTIONS

High-quality carbon offsetting, when used as a last step rather than a substitute for carbon reduction, can enable businesses to address unavoidable emissions while supporting climate mitigation projects such as ecosystem restoration or verified carbon removal. This approach aligns with guidance from bodies including the Science Based Targets initiative and the Climate Change Committee, which emphasise that offsets should complement – not replace – deep decarbonisation. For businesses, following this hierarchy enhances credibility, reduces transition risk, supports stakeholder confidence and demonstrates alignment with emerging expectations around responsible Net Zero claims.

GLOSSARY:

Carbon offset – refers to a mechanism that allows individuals and companies to compensate for their greenhouse gas emissions by financing external projects that reduce or remove emissions, such as renewable energy installations and reforestation efforts. Carbon offsets can be bought, sold, or traded as part of a carbon market.

HOW TO UNDERTAKE HIGH-INTEGRITY CARBON OFFSETTING

Step 1: Measure your emissions
Start by calculating your greenhouse gas emissions (energy use, fuel, travel, purchased goods where possible). Use recognised guidance such as the Greenhouse Gas Protocol. You can't manage what you haven't measured.

Step 2: Reduce what you can first
Before considering offsets, prioritise practical reductions – improve energy efficiency, switch to renewable electricity, reduce waste, optimise logistics and review suppliers Offsetting should never replace real emission cuts.

Step 3: Set a clear net zero target
Define when you aim to reach net zero and include interim milestones. Guidance from the Science Based Targets initiative helps ensure targets align with climate science.

Step 4: Identify residual emissions
After reduction efforts, calculate the emissions that remain and cannot yet be eliminated due to technical or economic constraints. These are your residual emissions.

Step 5: Purchase high-quality, verified offsets
Choose projects certified by reputable standards such as Gold Standard or Verra. Ensure projects demonstrate additionality, permanence and independent verification. Nature-based projects (e.g. peatland restoration or afforestation) can provide biodiversity and community co-benefits alongside carbon removal.

Step 6: Be transparent and review annually
Disclose how much you emit, how much you've reduced and how much you've offset. Review progress each year and aim to shrink your reliance on offsets over time.

REFERENCES:

Deloitte (2023) Deloitte 2023 Gen Z and Millennial Survey Gives Employers Actionable Insights into Climate, Sustainability and Work/Life Balance, Perspective, Deloitte, accessed on 20.05.26. through https://www.deloitte.com/global/en/services/consulting-risk

HELPFUL RESOURCES AND SUPPORT:

UK Land Carbon Registry – directory of registered UK Carbon Code projects.

The Core Carbon Principles – *resources to support participants wanting to engage with voluntary carbon markets.*

Greenhouse Gas Protocol (GHG) – *main starting point for organisations interested in measuring and reporting greenhouse gas emissions.*

SBTi Corporate Net-Zero Standard – *guidance and tools for companies net-zero targets setting in line with climate science.*

OPPORTUNITY 5

ENHANCING EMPLOYEE WELLBEING

OPPORTUNITY

Many studies confirm benefits of connectedness to nature for employee wellbeing. Humans are dependent upon, drawn to, and fascinated by the natural world. Many people feel happier, healthier and more at ease when they are outdoors and surrounded by nature in gardens, parks, forests, mountains, lakes and the coast. Incorporating elements of nature, greenery and natural lighting into the workplace has been shown to have a positive impact on employee mental and physical wellbeing, creativity and productivity, and there are some simple and low-cost ways of achieving this, even in the most built-up areas. Studies confirmed that physical access to nature prior, during or after workday improves employee wellbeing. Connection with nature can reduce burn-out through nature-based health promoting interventions with employees.

KEY TERMS:

Connectedness to nature,
Employee wellbeing,
Biophilic design in the workplace,
Nature-based health promoting interventions

KEY FACT:

85% OF THE UK POPULATION LIVES AND WORKS IN URBAN ENVIRONMENTS THAT ARE TRADITIONALLY DEVOID OF NATURE, PEOPLE SPEND MORE TIME INDOORS AND HAVE INCREASED VIRTUAL AND INDOOR WORK AND RECREATION (STATISTA, 2026).

OPPORTUNITY 5: ENHANCING EMPLOYEE WELLBEING

CONNECTEDNESS TO NATURE AND EMPLOYEE WELLBEING

Connectedness to nature (CN) is referred to emotional, physical and social connection with nature. Recent studies confirm links between connectedness to nature and wellbeing in the workplace. Connection with nature can reduce burn-out through nature-based health promoting interventions with employees (Sterckx et al., 2021). A nature evening walk after a workday positively relates to beginning of the next-morning workday and subsequent work effort in employees with high levels of nature connectedness (Koltz et al., 2023).

A large-scale study of 783 employees in Finland showed linked between physical nature connection and employee wellbeing. Those with high exposure to nature – experiencing natural environments almost daily during their workday – reported the lowest burnout and the highest work engagement (Hyvönen et al., 2018). Incorporating nature into ways of working enhances both employee physical and mental health, whilst creating a culture more likely to adapt to the changes needed to address the climate emergency.

BIOPHILIC DESIGN IN THE WORKPLACE

Biophilic design of the workplace is one of the approaches to workplace environment design that give wellbeing through connection with nature a greater emphases. People have incorporated biophilic design for many years in their homes, such as gardens, the use of house plants and natural lighting, displaying nature-based paintings or photographs and even selecting nature-based colour schemes when decorating. This concept is now being more formally used in the workplace. British Safety Council reports the following key features of biophilic design that have proven to have a positive impact on wellbeing in the workplace (BSC, 2025):

- **A view of nature:** by having images of the natural world, as well as plant life and other natural elements, employers can introduce a 'natural view' into an unnatural environment.
- **Physical stimuli:** use of fragrances, textures, sounds and other physical stimuli to awaken the sense of smell, touch, sound and taste related to nature.
- **Airflow variability:** simply opening the window, introducing fans or installing or using air conditioning units with a natural airflow setting can help create a more positive work environment.
- **The use of water:** incorporating the natural visual and audio effects of water into an office, whether it be through a water fountain, water chains outside the window or even an aquarium.
- **The use of natural light:** natural, dynamic lighting systems have been known to positively impact on circadian system functioning, which keeps us in synchronicity with the 24-hour day, therefore also improving sleep patterns (Karaman and Avici, 2022).
- **Biomorphic shapes and forms:** A biomorphic shape or pattern can be recreated within the workplace by selecting interestingly shaped furniture or decorations.
- **Spatial hierarchy:** This is the way in which different elements within a workplace are spaced and positioned. For example, availability of quiet, screened-off spaces or large, open social areas that invite collaboration.

OPPORTUNITY 5: ENHANCING EMPLOYEE WELLBEING

NATURE-BASED HEALTH PROMOTING INTERVENTIONS

Nature-based health promoting interventions can be small or large – depending on the organisational appetite to make changes for the better. Some of them can be changes to the design of the workplace inspired by biophilic principles discussed earlier and some can be to do with work practices. The changes to work practices that strengthen employee connectedness to nature are:

- Outdoor physical exercise breaks during workday;
- Providing secure bike racks to encourage staff cycling to and from work;
- Changing facilities for staff who exercise outside;
- Promoting a positive working culture and supporting people to be more active in nature;
- Organising staff volunteering opportunities to support NbS on business site and in local community.

WHAT BUSINESSES SAY:

Setting up a team of Mental Health First Aiders who promote engaging with NbS as a tool to support personal wellbeing has been successful at Lubrizol. The team holds nature-based wellbeing workshops run by the Derbyshire Wildlife Trust, which have been so popular amongst staff that they have become an annual event:

"It's an employee engagement piece and I think using our employee resource groups and the mental health first aid teams to deliver to people what is the benefit [of NbS] to them."

– Lubrizol

GLOSSARY:

Connectedness to nature – refers to the extent to which individuals feel a sense of belonging and emotional attachment to the natural world, influencing their identity, well-being, and environmental behaviours.

Biophilic design – is an architectural and interior design approach that seeks to connect people with nature, enhancing well-being and productivity through the integration of natural elements into built environments.

Nature-based health promoting interventions – organised indoor and outdoor activities that aim to improve people's health through engaging with nature.

REFERENCES:

British Safety Council (BSC) (2025) A green and bright workplace: how biophilic design boosts employee wellbeing, safety management, British Safety Council, https://www.britsafe.org/safety-management/2025/a-green-and-bright-workplace-how-biophilic-design-boosts-employee-wellbeing

Hyvönen, K., Törnroos, K., Salonen, K., Korpela, K., Feldt, T. and Kinnunen, U., 2018. Profiles of nature exposure and outdoor activities associated with occupational well-being among employees. Frontiers in psychology, 9, p.754.

Karaman, G. D., & Avci, A. N. (2022) Analyzing natural lighting conditions from the perspective of biophilic design in indoor office environments. IOP Conference Series: Earth and Environmental Science (Vol. 1099, No.1, p. 012034). IOP Publishing.

Klotz, A.C., McClean, S.T., Yim, J., Koopman, J. and Tang, P.M., 2023. Getting outdoors after the workday: The affective and cognitive effects of evening nature contact. Journal of Management, 49(7), pp.2254-2287.

Sterckx, A., Van den Broeck, K., Remmen, R., Dekeirel, K., Hermans, H., Hesters, C., Daeseleire, T., Broes, V., Barton, J., Gladwell, V. and Dandy, S., 2021. Operationalization of one health burnout prevention and recovery: participatory action research-Design of Nature-Based Health Promotion Interventions for employees. Frontiers in Public Health, 9, p.720761.

HELPFUL RESOURCES AND SUPPORT:

Mental Health of Employees toolkit – https://www.bitc.org.uk/toolkit/mental-health-for-employers-toolkit/

Building with Nature – *https://www.buildingwithnature.org.uk/*

Biophilic Office Design: The Science, Benefits and Examples – *https://www.knightfrank.co.uk/office-space/insights/culture-and-space/biophilic-office-design/*

OPPORTUNITY 6

BOOST INNOVATION & PRODUCTIVITY OF YOUR TEAMS

OPPORTUNITY

Research on 'micro-nature' – the incorporation of small, affordable natural elements into workplaces – demonstrates its positive impact on employee performance and well-being (Klotz et al., 2023). Recent research shows that increased connection to nature could lead to an increase in creativity, increase in attention capacity, concentration and reduction of mental fatigue (Ratcliffe et al., 2021). These findings indicate that bringing interventions that strengthen connection to nature in your workplace could charge the innovation as well as productivity of your teams. Volunteering for nature is a great way of making your teams stronger and support nature at the same time.

KEY TERMS:

Attention restoration, Innovation, creativity, Productivity of teams

KEY FACT:

COMPANIES WHO INCORPORATED NATURE-BASED DESIGN IN THE WORKPLACE HAVE REPORTED UP TO 6% INCREASE IN PRODUCTIVITY AND UP TO 15% IMPROVEMENTS IN EMPLOYEE WELLBEING AND CREATIVITY.

PRODUCTIVITY AND CREATIVITY OF YOUR TEAMS

When it comes to boosting productivity of your teams, nature could be your best ally. According to Earth Trust, an Oxfordshire based NGO that provides education and volunteering opportunities in nature for businesses, 'giving ourselves even a small bit of nature in our daily life, we can recharge our brains and make ourselves more productive' (Earth Trust, 2023). The reasons for improved productivity in nature are aligned to effects of outdoor environment to relieve tensions, reduced anxiety and making us feel more enthusiastic. The studies report that spending even a short time in nature improves our short-memory function by 20%.

Being in nature provides a great opportunity for teambuilding. Exposure to nature is known for bringing people together, motivating and building trust between them for better collaboration and sharing ideas. Taking your teams outside to hold meetings encourages creativity and thinking 'outside the box'.

Proven health benefits of great outdoors of improving sleep quality and boosting energy levels are important for recharging our brains and allowing our body to recover and restore. This leads to higher level of performance of your teams and organisations.

WHAT BUSINESSES SAY:

"The top management gets the idea of the benefits to people but also the organisational benefits as well. Getting staff and management on board is sometimes challenging but it's great when you get people that really get it."

– Phoenix Futures

TOP TIPS TO SUPERCHARGE YOUR TEAMS

Green your office space – from small changes such as having a plant on your desk to big ones: office redesign to incorporate biophilic design principles more fully; you can not go wrong with inviting more nature into your place of work.

Take breaks from work in nature – as little as 15 minutes away from your desk is proven to boost the energy levels and improve concentration and attention restoration. It is good for noticing nature too!

Hold meetings outside – it is a great opportunity to both bring a bit of life in your work meetings (literally) and show your pro-nature leadership style.

Walk and talk – another one for your pro-nature leadership style.

Support staff volunteer opportunities for nature recovery – that is what the best pro-environmental businesses do! Reach out to your local community and the NbS providers to shape volunteering for nature to suit your Corporate Social Responsibility (CSR) Strategy.

REFERENCES:

Earth Trust (2023) Working in nature boosts productivity, https://earthtrust.org.uk/working-in-the-natural-environment-boosts-productivity/

Klotz, A., McClean, Sh.,Tang, P.(2023) Research: a little nature in the office boosts morale and productivity, Harvard Business Review, 21 July 2023, https://hbr.org/2023/07/research-a-little-nature-in-the-office-boosts-morale-and-productivity

Ratcliffe, E., Gatersleben, B., Sowden, P.T. and Korpela, K.M., 2022. Understanding the perceived benefits of nature for creativity. The Journal of creative behavior, 56(2), pp.215-231.

HELPFUL RESOURCES AND SUPPORT:

PlantPlan *– case studies of green spaces in the workplace https://www.plantplan.co.uk/case-studies.*

WWF-UK Sustainable Office Guide *– with many practical tips and instructions for measuring footprints and helping our planet https://www.wwf.org.uk/updates/top-20-tips-workplaces-sustainable*

Wildcreatives *– 50 ways to be creative in nature https://www.wild-creatives.co.uk/creativity-hub/50-ways-to-be-creative-in-nature*

GLOSSARY:

Attention restoration – is an approach that asserts exposure to natural environments can significantly enhance mental focus and alleviate cognitive fatigue, promoting overall well-being.

OPPORTUNITY 7

STRENGTHEN YOUR BRAND & REPUTATION

OPPORTUNITY

NbS activity should be well aligned to your business marketing and strategy Gaining and sustaining your green reputation is an important way to signal your nature-based values as well as appeal to green consumers, suppliers and other businesses. Environmental accreditation can add external validation and credibility to your green credentials. It is a great way to focus your business model, identify cost savings and reduce emissions whilst appealing to new customers/markets.

WHAT BUSINESSES SAY:

ISO 14001 is helpful to focus our carbon reduction activities for example *"The bulbs and things like that are low carbon tech. We've got all of our cars as EV cars; we have EV chargers here too. And then the location itself. We looked around and said 'Well, what can we do?' And the first thing we did, when we laid the car park, was to put a porous car park down. So the runoffs are less because we're on a hill working against floods; it's better that way."*

– Cosy Direct

KEY TERMS:
Brand,
Reputation,
Market positioning

KEY FACT:
77% OF INDUSTRY EXECUTIVES AGREE THAT SUSTAINABILITY CAN ACCELERATE BUSINESS GROWTH. 3 OUT OF 5 EXECUTIVES SAY THEY PURPOSEFULLY ALIGN SUSTAINABILITY WITH OPERATIONS GOALS TO OPTIMISE INVESTMENTS AND ACHIEVE OBJECTIVES IN BOTH AREAS (IMB, 2023).

OPPORTUNITY 7: STRENGTHEN YOUR BRAND AND REPUTATION

ENVIRONMENTAL MANAGEMENT ACCREDITATION

Gaining and sustaining your green reputation is an important way to signal your pro-nature values as well as appeal to green consumers, suppliers and other business. Environmental management accreditation (EMA) can add credibility to your green credentials. It is also a great way to focus your business model, identify cost savings and reduce emissions whilst appealing to new customers/markets.

The most high-profile and reputable EMAs include ISO 14001 Environmental Management Standard and ISO 50001 Energy Management Standard. Whilst the time, cost and expertise required to complete these can be prohibitive for SMEs, these might be unavoidable as EMAs are often a threshold entry requirement to businesses to access green supply chains. Fortunately, there are a number of smaller scale and less costly EMAs aimed specifically at SMEs. They include:

- **Investors in the Environment** – provides a step-by-step approach through three levels of accreditation that allows firms to set achievable targets and establish a pathway of continual improvement.
- **GreenMark** – helps you reduce your environmental impact with a clear, web-based certification process; a useful step towards more demanding ISO14001.
- **B Impact** – is B Lab's digital platform, designed to help businesses seamlessly measure, manage, and improve your company's impact – all in one place. It creates a benchmark of the firms environmental and social performance. The snapshot report takes 30mins to complete with the impact reporting and providing comparison with similar businesses in the same sector.
- **GRI Standards** – enable any organisation – large or small, private or public – to understand and report on their impacts on the economy, environment and people in a comparable and credible way, thereby increasing transparency on their contribution to sustainable development. Globally recognised reporting standards such as GRI 101: Biodiversity 2024 and GRI 102: Climate Change 2025 are particularly relevant to reporting of impact on nature.
- **Biodiversity Benchmark** – The Wildlife Trusts' Biodiversity Benchmark is the only standard that certifies the management of your business site for wildlife. Landowning businesses can be a positive force for nature's recovery and we want to recognise and celebrate those businesses which have achieved excellence. Biodiversity Benchmark is designed to complement ISO14001 and tests the design and implementation of a business's management systems to achieve continual biodiversity enhancement and protection on their sites.

REFERENCES:

IBM (2023) Redesigning Brand Values, Purpose and profit coverage in core operations, IBM Institute for Business Value | Research Insights, IBM Corporation 2023.

VALUE-DRIVEN GREEN BRAND AND REPUTATION

No longer reputation is built on price and product alone. It is increasingly built on purpose. As customers, employees and shareholders demand businesses to care for nature, it is trust that is a new currency of reputation. Business purpose that is enthused by pro-environmental and social aspirations and build on trust is becoming a norm.

Businesses are increasingly incorporating their care for nature and sustainable business growth aspirations. As Sustainable Brands acknowledge, the role of a environmental and social values goes well beyond product design, development and commercialisation. The core marketing functions such as market research, advertising and sales are critical to effective positioning in the market. Internal and external stakeholders are becoming increasingly sensitive to environmental risk and the market for ethical products and services is growing rapidly. With clear environmental credentials in one hand, your business will need to craft and communicate a clear green value proposition to attract new customers and succeed in new markets with the other. Marketing strategy that has value for nature in its heart can be very effective when launching new green products or services, communicating in new markets and streamlining your business model to appeal to both suppliers and customers.

HELPFUL RESOURCES AND SUPPORT:

ESG Score Predictor *– Moody's launched a tool that provides estimates of environmental, social, governance, carbon emissions footprint, transition and physical risk management scores for any company, including SMEs.*

European Business & Biodiversity Platform *– is set up by the European Commission to work with and help business measure and integrate the value of biodiversity into business decision making. The site offers case studies, tools, guidance and data for strategic decision-making.*

GLOSSARY:

Environmental Management Accreditation (EMA) – is certification by the third party of your business environmental management practices, processes and strategies.

Environmental Management System (EMS) – is management processes that enable organisations to continually improve their environmental performance and through that reduce negative impacts on the natural environment.

Green marketing – is a practice that emphasises the environmental benefits of a product or service, which also reflects a brand's values.

Green Brand – consumer response based on differentiation and linked to environmental commitments and environmental concerns.

OPPORTUNITY 8

COMMUNITY IMPACT AND PLACEMAKING

OPPORTUNITY

Research identifies that when residents feel attached to the place they live, it can create a sense of place for them that inspires stewardship and pro-environmental behaviour within their locality. Residents develop a strong sense of loyalty to their local area, and this in turn supports location-specific environmental sustainability. Aspects of nature-inspired sense of place can be linked to landscapes, and the sense of peace and belonging that being in nature brings. Pro-environmental behaviour can also be inspired by native species of a wide range of wildlife, particularly if that species is rare or distinctive. Local ecological features contribute to sense of place and subsequently generate local support for NbS that explicitly demonstrate benefit to those well-loved species. Engaging in local volunteer projects has been repeatedly shown to develop community connection, inspire community action for change and form part of the 'social prescription' to combat loneliness, poor mental wellbeing or to support those with complex social needs. Combining local community volunteering with nature-based solutions can be powerful on many levels. It creates community cohesion, raises awareness of local environmental issues and makes a significant contribution to local ecology.

KEY TERMS:

Placemaking, Place attachment, Sense of place, Pro-environmental behaviour (PEB), stewardship

KEY FACT:

BETWEEN 2000 TO 2023, VOLUNTEER TIME DEDICATED CONSERVATION ACTIVITIES IN ENGLAND INCREASED BY 44% (DEPARTMENT FOR ENVIRONMENT, FOOD AND RURAL AFFAIRS, 2025).

NBS VOLUNTEER APPROACHES

Annually committing employee hours to NbS projects – By donating one to three days of employee hours annually to local NbS causes, local businesses can build connections with the local community, build stronger teams within their organisation and contribute to sustainability goals.

Example: *Cosy dedicate one employee day a year to visiting schools and improving their outdoor areas for free through tree planting and landscaping.*

Establishing employee led volunteer groups – Facilitating the formation of employee-led volunteer groups who adopt local NbS interventions according to their specific interests.

Example: *Lubrizol have individual formal volunteer groups for maintaining the bat boxes, tending the vegetable plots and counting butterfly species on their land throughout the year.*

Connect to areas of local interest that employees are already invested in – Collaborating with existing NbS initiatives or conservation groups that support spaces already considered important to employees.

Example: *Lubrizol support employees to volunteer at Aqueduct Cottage, Cromford, which is a building within the Derwent Valley Mills World Heritage Site that has recently been renovated by the DWT.*

Reaching out to local groups can enable knowledge-sharing around NbS – Local conservation groups have a wealth of local knowledge they are willing to share to help set up NbS project.

Example: *Christian Conference Trust have a longstanding relationship with The Swanwick Wildlife Group; this has become a mutually beneficial relationship.*

Championing a specific species can motivate engagement – Choosing a particular aspect of NbS can focus volunteer activity, meaning impact is more easily measurable and momentum builds quicker.

Example: *Phoenix Futures became involved in The Great Reserve initiative, nurturing and planting giant sequoia trees as part of a nationwide initiative.*

HELPFUL RESOURCES AND SUPPORT:

Various in-community volunteering organisations *– Bat Conservation Trust; British Trust for Ornithology; Canal & River Trust; The Conservation Volunteers; Plantlife; Royal Society for the Protection of Birds; The Wildlife Trusts.*

Public policy regulators *– National Parks England and Natural England.*

GLOSSARY:

Placemaking – a destination development concept that includes both organic community-led approaches and organisation-level destination management to create a holistic sense of place.

Place attachment – people's sensory, interpersonal attachment to places; environmental studies apply the theory to people's attachment to natural environments.

Sense of place – the interpersonal and intrapersonal shifts that occur as a result of place attachment; for residents, sense of place also builds sense of community.

Pro-environmental behaviour (PEB) – behaviour that seeks to minimise negative environmental impact.

SENSE OF PLACE AND PRO-ENVIRONMENTAL BEHAVIOUR

Place attachment and sense of place are highly subjective and experienced via four key aspects – place identity, place dependence, place affect and place social bonding. What primarily distinguishes sense of place from place attachment is connectedness, whether this is connecting to the natural world, our history, each other or some spiritual aspect of our inner selves. This is hard to define, and research shows that the reasons individuals give for experiencing sense of place vary widely (Amsden et al., 2011).

Place attachment and sense of place are key to sustainability because it can positively encourage residents – and also visitors – to behave in an environmentally responsible way (Lee & Oh, 2018). This is also true for businesses, particularly those that exhibit a high degree of integration with local communities (Wen et al., 2020). However, local business PEB has a double impact; that of their own pro-environmental actions and the pro-environmental actions they inspire in others. If residents feel invested in their locality, either emotionally or through place dependency, their desire to preserve it increases. and they are more likely to engage in pro-environmental behaviours (Zhang et al., 2014).

Including sense of place as a tangible factor in eco-system planning and management means a more holistic approach to environmental sustainability can be adopted, which could be a key factor in creating stakeholder cohesion. Linking sociological, emotional and cultural importance of sites with their ecological importance could inform eco-system management and promote ecological significance to non-specialists. However, research implies that sense of place is intangible in nature, and where sense of place is encouraged to be part of planning and management, there is an emphasis on its fluid and multi-dimensional nature. This means that the management and planning infrastructure surrounding it has to be flexible too, so it can be responsive to the changes of sense of place over time (Puren et al., 2018).

REFERENCES:

Amsden, B., Stedman, R., & Kruger, L. (2011). The Creation and Maintenance of Sense of Place in a Tourism-Dependent Community. LEISURE SCIENCES, 33(1), 32–51.

Department for Environment, Food and Rural Affairs. (2025). Taking action for the environment: Volunteer time spent in conservation [Response indicator, Official Statistic]. UK Government. https://www.gov.uk/government/statistics/england-biodiversity-indicators/taking-action-for-the-environment-volunteer-time-spent-in-conservation#acknowledgements

Lee, J. S. H., & Oh, C. O. (2018). The Causal Effects of Place Attachment and Tourism Development on Coastal Residents' Environmentally Responsible Behavior. Coastal Management, 46(3), 176–190.

Puren, K., Roos, V. and Coetzee, H., 2018. Sense of place: using people's experiences in relation to a rural landscape to inform spatial planning guidelines. International Planning Studies, 23(1), pp.16–36.

Wen, T., Zhang, Q., & Li, Y. (2020). Why small tourism enterprises behave responsibly: Using job embeddedness and place attachment to predict corporate social responsibility activities. Current Issues in Tourism.

Zhang, Y., Zhang, H.-L., Zhang, J., & Cheng, S. (2014). Predicting residents' pro-environmental behaviors at tourist sites: The role of awareness of disaster's consequences, values, and place attachment. Journal of Environmental Psychology, 40, 131–146.

OPPORTUNITY 9

PARTNERSHIPS FOR NATURE

OPPORTUNITY

Collaboration and partnerships are important pathways to achieving sustainable development goals (SDGs) (UN, 2015). As one of the UN SDGs, Goal 17 (Partnership for the Goals) targets strengthening of the collaborative approaches and partnerships in driving and providing resolutions to sustainability challenges. Nature-base solutions often require engagement with multiple stakeholders on complex and sometimes conflicting agendas on land management, flood prevention strategies and other. Working in partnerships could not only develop long-standing and trusting relationships to achieve a common goal, they could bring benefits of knowledge-sharing, learning, operational synergies and strategic lobbing in times of ever expanding governmental priorities and ever reducing budgets of local authorities.

KEY TERMS:

Environmental stakeholders, Multi-stakeholder collaboration, Partnerships, Sustainable Development Goals

KEY FACT:

DESPITE A WIDESPREAD RECOGNITION THAT COLLABORATION AND PARTNERSHIP APPROACH IS AN ENABLING PATHWAY FOR SUSTAINABLE DEVELOPMENT GOALS, ONLY 9.1% OF BUSINESSES IN THE EAST MIDLANDS COLLABORATED FOR GREEN GROWTH (BARANOVA, 2025).

COLLABORATION FOR NBS DESIGN AND DELIVERY

Multi-stakeholder partnerships have become an important tool for achieving Sustainable Development Goals, which involve stakeholders from business, government, and the civil society (Selsky & Parker, 2005). They hold the promise of reconciling divergent interests and perspectives of these groups to achieve solutions that are accepted and supported by all. Resolutions to sustainability challenges require effective collaboration and partnerships that can surface and manage conflicts and support constructive dialogues across a broad range of stakeholders with varying interests and institutional cultures.

In the context of nature recovery, collaboration is key to the effective design, delivery and monitoring of nature-based solutions. It applies to a range of initiatives including conservation, restoration, rewilding, urban greening, community gardening, sustainable forestry and agriculture. Engagement can involve approaches like consultation, collaboration, partnership working, and co-design: it is ultimately about how people can work together to deliver for nature. From a business perspective, long-standing NbS partnerships deliver the most value in terms of driving NbS engagement at the level and pace your teams are comfortable with.

WHAT BUSINESSES SAY:

"You're not to be collaborated at; you're to be collaborated with."

– Dale Grange Farm

"Having partnerships with organisations such as Natural England or the Wildlife trusts, it's good for us. It's something we really need to develop, I would argue, and probably promote a little bit more. But it's good. It puts us in a positive light."

– Phoenix Futures

TOP TIPS TO DEVELOP EFFECTIVE NBS PARTNERSHIPS

Shared vision and common goal – Important to focus the collaborative efforts and to be used as a 'common ground' stakeholders could agree on, even if their motivation is different.

Knowledge-sharing – Prevents duplication and builds collective understanding.

Develop a 'common language' – In order to bridge professional, subject and intitutional silos to collaborate effectively and to problem-solve.

Clear roles and responsibilities – Avoids confusion and ensures accountability.

Committed leadership – Senior leaders who champion NbS internally and externally drive action.

Two way communication – Top-down and bottom-up dialogue builds trust.

Resourcing and coordination – Dedicated staff, funding, and time are essential.

Incentives and recognition – Financial, policy, or reputational rewards motivate participation.

Use of digital platforms – Use digital tools responsibly, addressing concerns related to digital divides, biases, and the quality of social interaction.

Inclusivity and transparency of partnership work – Involve under-represented and marginalised communities to champion inclusive participation in NbS; ensure transparency of communication, reporting and decision-making for NbS success.

REFERENCES:

Baranova (2025) Green Growth Trends in the East Midlands 2025, University of Derby.

Selsky, J.W. and Parker, B., 2005. Cross-sector partnerships to address social issues: Challenges to theory and practice. Journal of management, 31(6), pp.849–873.

UN (2015) United Nations (2015) Transforming our World: The 2030 Agenda for Sustainable Development. United Nations 2015 https://sustainabledevelopment.un.org/post2015/transformingourworld/publication

HELPFUL RESOURCES AND SUPPORT:

Nature-based Solutions Knowledge Hub *– case studies of NbS in the UK. An integrated one-stop resource to guide users through the process of governance, designing and funding Nature-based Solutions (NbS), and monitoring the outcomes.*

Best practices for Nature-based solutions *– UN Environmental Programme portal which contains NbS cases and guidelines.*

GLOSSARY:

Multi-stakeholder collaboration – involves diverse groups working together to achieve common goals, particularly in areas like sustainable development, by leveraging their unique resources and expertise.

OPPORTUNITY 10

ATTRACT TALENT AND CHAMPION GREEN GROWTH

OPPORTUNITY

To succeed by growing sustainably i.e. through green growth, businesses need to attract the best talent out there. Green skills are increasingly becoming mainstream; green jobs are seeing longitudinal increase in demand of 34.6% during 2015–2023 (PwC UK, 2024). Your business competitive advantage is linked to the quality of the talent it attracts. If your business values are aligned with acting for nature, and you actively support pro-environmental behaviour in the workplace, there is a strong likelihood the talent your business attracts would share that too. In many ways this is responsible futures in the making.

KEY TERMS:

Green growth,
Green skills,
Green jobs

KEY FACT:

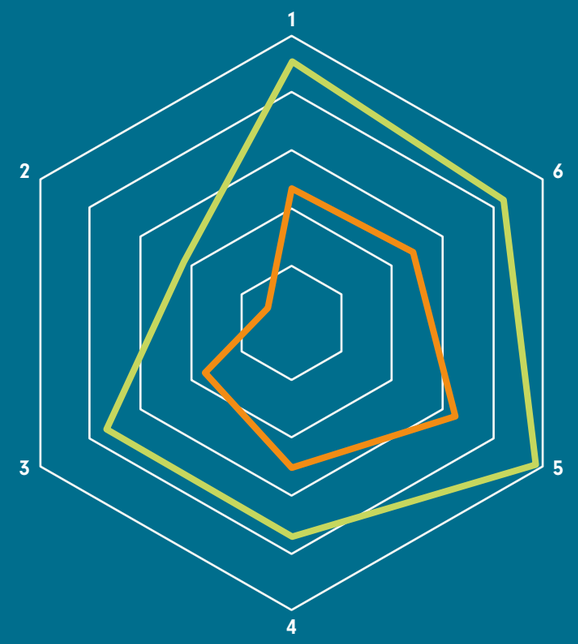
RESEARCH INDICATES 61% OF GEN Z BRITS PLACE AS MUCH IMPORTANCE ON THEIR EMPLOYERS' VALUES, SUCH AS GREEN CREDENTIALS, HONESTY AND SOCIAL RESPONSIBILITY, AS WHAT THEY TAKE HOME IN THEIR PAY PACKET (CO-OPERATIVES UK, 2025).

OPPORTUNITY 10: ATTRACT TALENT AND CHAMPION GREEN GROWTH

GREEN GROWTH CHAMPIONS AND NBS

Our research shows businesses that champion green growth out perform other businesses in five areas:

1. Sales from green goods and services
2. Collaboration for green growth
3. Engagement with Nature-based Solutions
4. Use of business support
5. Strategy alignment
6. Investment in decarbonisation



GGC Other Businesses

NATURE BASED SOLUTIONS

Although Nature-based Solutions are becoming an integral part of successful business environmental strategies, there is a still along way to go before they will become a part of the mainstream business-nature interface. The Ecological Impact Enrichment (EIE) approach discussed in the opening section of this toolkit, should go a long way to support this shift.

Integration, both within and across organisations, is critical to the effective implementation of NbS, ensuring that they deliver maximum benefits for people and the planet while minimising any trade-offs between goals. Integration refers to the strategic blending of ecological, social, and economic considerations in the planning and execution of NbS. At its core, integration recognises that nature is not isolated from human society but intricately linked to it.

REFERENCES:

Amsden, B., Stedman, R., & Kruger, L. (2011). The Creation and Maintenance of Sense of Place in a Tourism-Dependent Community. LEISURE SCIENCES, 33(1), 32–51.

HELPFUL RESOURCES AND SUPPORT:

Green Growth Accelerator *– tools and resources to accelerate your green growth strategy, Boston Consultancy Group.*

A decade since the SDGs, a green growth agenda is growing *– The World Economic Forum.*

Taskforce on Nature-related Financial Disclosure (TNFD) *– A database of NbS projects, resources and market insights.*

GLOSSARY:

Green Growth – is an emerging alternative to the conventional view of the economic growth, and means fostering economic growth and development while ensuring that natural assets continue to provide the resources and environmental services on which our well-being relies (OECID, 2022).

Green Jobs – An umbrella term for the technical skills, knowledge, behaviours and capabilities required to tackle the environmental challenges we face and to unlock new opportunities for growth.

Green Skills – Specialist roles that focus on specific domains or initiatives dedicated to improving environmental outcomes for an organisation or for the economy.

NEXT STEPS ON YOUR NBS JOURNEY

The businesses we worked with as part of the **Better Business 4 Nature** project, share the following tips for those who are either new to NbS or wanting to accelerate their NbS engagement and nature restoration work to wider communities:

NBS IMPLEMENTATION TIPS

1. **Taking that very first step is the most important thing** – Things like adding bird and boxes and planting trees can all be done with relatively low cost and need no expertise. These small actions will kickstart the NbS conversations that will eventually grow into much bigger projects.
2. **Start small** – Don't go too big immediately. Make sure whatever you do is suitable and achievable for your own individual organisation. It must make sense for your own individual business based on size, location and resources.
3. **NbS solutions relative to a business size** – Look for NbS solutions that are deigned flexibly for large and small businesses.
4. **Educate staff** – As to the importance of NbS and raising awareness of its impact on the environment and their own personal wellbeing. This can help create staff buy-in.
5. **Seek help from bridging organisations** – Such as the Derbyshire Wildlife Trust, Butterfly Conservation and The Derwent Valley Trust.
6. **Get advice early** – The shared expertise of academics, wildlife experts and farmers is important if NbS projects are to succeed. Whilst it is possible to gain small pots of funding for small changes, fully transitioning to NbS needs a broad range of complimentary knowledge to make large scale changes.
7. **Find a local site you can support** – This will provide a focus for employees and act as a networking facilitator as well as an outlet of supporting nature. It helps if this is a place well known to most employees through their everyday lives, such as places they cycle or walk or visit with family. This means they can share the nature restoration volunteering work they have done with their own social circle, and it instils a sense of pride.
8. **Make sure you find a common language when collaborating** – Combining multiple knowledge bases can be confusing if not approached in the right way. When reaching out to different, often insular, communities like agriculture, it's important to communicate in their language, listen to their perspective and use examples that are meaningful to them.
9. **Whether you are seeking to engage your workforce or the public** – It's important to get them involved from the very start. It is their enthusiasm that will drive projects and 'take them further than you'd even hoped.'
10. **Networking** – Is an excellent way to find support with NbS implementation.

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LIST OF TRUSTED NBS PROFESSIONALS AND INTERMEDIARIES

Wildlife Trusts – a network of chartable wildlife trusts operating in the UK.

CLA Natural Capital Business Directory – Search directory of nature solutions specialists, advisers and market participants.

CIEEM Finding a Consultant – Search directory for CIEEM qualified consultants.

Trent Rivers Trust – is a registered charity for waterways restoration in the Trent catchment.

Other NbS stakeholders – City and county councils, NbS community volunteer groups, NbS business networks, The Chamber, Universities and Research Institutes.

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