

- Title:** When national security assessment meets boardroom duty: why biodiversity loss and ecosystem collapse demand urgent action
- Overview:** The Joint Intelligence Committee/DEFRA report confirms that biodiversity loss and ecosystem collapse threaten essential services like water, food and clean air, with cascading impacts from crop failures to geopolitical instability. These findings reinforce the urgent need for boards to put sustainable transition at the heart of strategy and governance, as systemic risks increasingly endanger business continuity and value.
- Categories:** ESG
Natural Resources, Energy and Environment
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Full Article

In brief

- Originally slated for publication last October, the Joint Intelligence Committee/DEFRA assessment of the national security risks of biodiversity loss and ecosystem degradation has finally been released.
- The report confirms that biodiversity loss puts at risk the ecosystem services on which human societies depend to function, including water, food, clean air and critical resources.
- Cascading impacts will range from crop failures, intensified natural disasters and infectious disease outbreaks to interstate conflicts, and geopolitical and economic instability.
- Findings reinforce the recommendations of our Seeing beyond the ESG backlash board briefing, and the results of our latest Sustainability Leaders Panel, which demonstrate the value of putting sustainable transition at the heart of strategy and governance.

What does the national security assessment conclude?

Aiming to support national security planning by identifying risks to the UK from global biodiversity loss and ecosystem collapse, the report presents a reasonable worst-case scenario. Its key judgements are that:

- 1. Global ecosystem degradation and collapse threaten UK security and prosperity**
The world is already experiencing impacts including crop failures, intensified natural disasters and infectious disease outbreaks. Threats will increase with degradation and intensify with collapse. Without major intervention to reverse the current trend, this is highly likely to continue to 2050 and beyond.
- 2. Ecosystem degradation creates cascading risks**
Those risks are likely to include geopolitical instability, economic insecurity, conflict, migration and increased inter-state competition for resources.
- 3. Key risks to the UK relate to breakdown of systems that support food production, and impact global climate, water and weather cycles**
Severe degradation or collapse of these systems would highly likely result in water insecurity, severely reduced crop yields, a global reduction in arable land, fisheries collapse, changes to global weather patterns, release of trapped carbon exacerbating climate change, novel zoonotic diseases, and loss of pharmaceutical resources. Threats to the Amazon rainforest, Congo rainforest, boreal forests, the Himalayas, and Southeast Asia's coral reefs are particularly significant to the UK.

4. Ecosystem degradation is happening everywhere, and every critical system is on a pathway to collapse

Ecosystems provide essential benefits to people, including provisioning services (e.g., food and water), regulating services (e.g., flood and disease control), and cultural services (e.g., recreation and sense of place). Across all regions of the world, there is a long-term reduction in ecosystems' capacity to provide these benefits; and every critical ecosystem is approaching tipping points, beyond which they could suffer irreversible changes.

5. Ecosystems could start to collapse within the next five years

There is a realistic possibility that some ecosystems, including Southeast Asian coral reefs and boreal forests, could start collapsing from 2030. Others, such as rainforests and mangroves, could start collapsing from 2050.

6. All countries are exposed to the risks of ecosystem collapse within and beyond their borders

Some will be exposed sooner rather than later and will likely act to secure their interests, triggering geopolitical competition for resources.

7. It's unlikely the UK will be able to maintain food security without significant increases in UK food system and supply chain resilience

The UK relies on imports for a proportion of both food and fertiliser and cannot currently produce enough food to feed its population based on current diets. Investment in ecosystem protection and restoration, and development of resilient and efficient food systems, is vital.

What does biodiversity loss and ecosystem degradation mean for business?

For "country" or "the UK" in the key judgements above, read "business". While these findings will no doubt be of greatest concern to any business involved in the food chain, they are relevant to everyone. Healthy, functioning ecosystems provide the foundations for all economic activity, and their degradation and collapse, wherever it is taking place in the world, is likely to impact the value chain of virtually any business.

This simple truth is core to our board briefing, exhorting boards to see beyond the current ESG backlash, and to recognise and act upon the existential threat posed by escalating and interconnected systemic risks.

The outcomes of the national security assessment only serve to sharpen the argument that climate change, biodiversity loss, rising inequality, and geopolitical volatility are no longer hypothetical future risks. They are already unfolding, with potentially catastrophic consequences for economic stability, business continuity, and the ability of organisations to preserve and enhance value.

Boards that don't affect necessary transformations in strategy and governance will find themselves increasingly out of step, not only with scientific reality, but also evolving legal opinion and stakeholder pressure to expand fiduciary understanding beyond maximising short-term shareholder value.

Those that do will not only better protect their businesses – and themselves – against accusations of failure to manage foreseeable risks. As our latest Sustainability Leaders Panel research shows, organisations that embed sustainability as a strategic imperative also significantly strengthen their reputation, resilience and competitiveness.

What practical steps should boards take to strengthen future resilience and competitiveness?

By embracing the following best practices, boards can position their businesses to lead and benefit from a planned transition, rather than risk succumbing to the costly fallout of an unravelling world:

1. **Build your understanding of external context**

Seek expert advice to better understand escalating systemic risks, the inevitability of sustainable transition, and the necessity of transformation to preserve future resilience and competitiveness.

We offer bespoke training for business leaders on a variety of topics including:

- The changing nature of value and fiduciary duty
- The evolving landscape of sustainability-related regulation and litigation
- Issue-specific briefings on key sustainability topics (e.g., climate change, biodiversity, equity, diversity and inclusion, supply chain resilience, and greenwashing and reputation management)
- Adopting a systemic approach to integrating sustainability into core strategy and governance

2. **Know where you are exposed to risk, lack resilience and need to transform**

Carry out a double materiality assessment (DMA) to properly evaluate your business' impacts and dependencies on social and ecological systems and use scenario planning to stress test the resilience of your current business model and strategy.

Done right, DMA isn't just part of the reporting process. It's a critical strategic tool, providing boards with valuable insights into where their businesses are exposed to risk, lack resilience and need to transform.

That's why we recommend it to clients, whether or not they are subject to regulations that require it.

3. **Fully integrate insights into purpose and strategy**

Based on a deeper understanding of impacts, dependencies, risks and opportunities, anchor corporate purpose and strategy in how the business can best contribute to a just and sustainable future.

Explicitly articulate the interdependence of business and systemic resilience to encourage bold innovation, focused on directing core capabilities towards solving problems of people and planet.

Our [Mishcon Purpose Framework](#) provides a systematic approach for integrating DMA insights across corporate purpose, strategy and governance.

Forming the basis of much of our ESG advisory work, it allows us to:

- Benchmark the quality of existing governance arrangements relative to best practices, including the status of operational frameworks and legal documents
- Identify critical gaps and the policies, practices and processes necessary to fully embed sustainability matters into strategy, governance and risk management
- Illuminate how implementing best practices can protect and enhance value, by supporting more informed decision-making, mitigating risks, improving access to capital, and driving positive social and environmental impact

4. **Reform governance and decision-making**

Ensure that governing body structures, competencies and understanding of duties reflect accountability for achieving purpose outcomes and empower all decision-makers to prioritise purpose outcomes through aligned policies, processes and procedures.

We draw on the expertise of specialist teams from across the firm to help design and implement the policies, practices and processes necessary to align interests and decision-making, e.g.:

- Drafting corporate constitutions, matters reserved to the board, and terms of reference of committees
- Advising on executive and employee remuneration and incentive arrangements to increase engagement and encourage behaviours aligned with the achievement of sustainability goals
- Drafting policies and procedures relating to the implementation of proactive and anticipative risk management
- Developing supply chain codes of conduct that encourage suppliers to flag emerging issues and challenges, and support joint learning and problem-solving to prevent and mitigate adverse impacts

5. **Prepare for challenges and setbacks**

Embrace the reality that sustainable transition is a process, and challenges and setbacks will occur. Put in place robust crisis management strategies and response plans to provide for swift mitigation and remediation of any adverse impacts, and establish mechanisms to apply lessons learned from any incident, addressing root causes and reducing the likelihood of reoccurrence.

Drawing on our network of international advisers, crisis communication experts, digital investigators, and experts in business strategy and public affairs, we offer specialist training and advice on handling crises and developing robust crisis management plans.

6. **Embrace your role as agents of systemic change**

It's time for sustainability leadership to go beyond targets and commitments at the individual company level. Build coalitions and collectively advocate for market reforms that will weed out free riders and reward superior contributions to the wellbeing of people and planet. This is key to transcending the perceived tension between commerciality and sustainability.

How can Mishcon de Reya help?

Mishcon Purpose – our interdisciplinary ESG and sustainability practice – combines expert lawyers and sustainability professionals. By balancing compliance with strategic foresight, we not only help clients to mitigate risk, but also to identify and seize opportunities to lead and benefit from sustainable transition. To discuss your biggest sustainability challenges and ways we can help, get in touch.