

A BIODIVERSIFY SERIES

Data: From Paralysis to Decision-Grade Insight

Measurement, decision-making and acting under uncertainty



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**ORGANISATIONS GET BETTER
BY ACTING, LEARNING AND
ADJUSTING, NOT BY WAITING
UNTIL THE PICTURE IS FINISHED**

Data: From Paralysis to Decision-Grade Insight

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FOREWORD

Many organisations are now moving from nature ambition into implementation. Strategies have been set, risks are being mapped, and teams are beginning to ask more detailed questions about where and how to act. Yet one challenge continues to slow progress: how to make good decisions when the data is incomplete, inconsistent or difficult to interpret.

This report continues the guide series, focusing on how organisations can move from data paralysis to decision-grade insight. It explores how sustainability teams can use imperfect information pragmatically, avoid mistaking measurement for progress, and build the confidence needed to act under uncertainty.

The insights shaping this report come directly from sustainability professionals navigating these challenges in their organisations. Biodiversify was proud to co-host Accelerating Corporate Nature Positive Journeys with the Corporate Partnerships team at the Royal Botanic Gardens, Kew, where sustainability leaders shared practical barriers and opportunities for embedding nature in business strategy. We are also grateful to members of the Nature and Biodiversity Peer Group, whose perspectives have contributed further insights. Taken together, the guides form a practical roadmap for organisations seeking to turn nature ambition into credible, operational action.

This guide series has been made possible through the support of the Porticus Foundation.

Dr Sam Sinclair,

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Chair, Nature & Biodiversity Peer Group

DATA: FROM PARALYSIS TO DECISION-GRADE INSIGHT

Measurement, Decision-Making and Acting Under Uncertainty

Many organisations entering nature-related work hit the same wall early on: **what to measure, which metrics matter most, how much visibility is enough, and what level of confidence is needed before acting.** Those questions rarely have clean answers, and the uncertainty they create is often enough to stall organisations before they've properly started.

It isn't just perception. Nature-related measurement is genuinely becoming more complex at the same time organisations are being asked to move faster: frameworks keep evolving, methodologies remain inconsistent, and data availability swings wildly across sectors, commodities and geographies. The danger is that this complexity gets mistaken for a precondition: the idea that meaningful action has to wait for complete information.

It doesn't, and it can't. Global supply chains and ecosystem impacts are too complex and too location-specific for any organisation to reach full visibility in the near term.

So the real challenge isn't eliminating uncertainty. It's learning to make credible decisions inside it.



Two Common Failure Modes

Two failure modes come up again and again.

The first is **compliance minimalism**: organisations that focus heavily on disclosure requirements or reporting exercises without ever connecting the resulting data to operational decisions.

The second is **perfection paralysis**, where teams delay action while chasing increasingly complete datasets, even when they already have enough directional information to see where the risks likely sit.

Both slow implementation, just from opposite directions. One produces reporting without operational change; the other holds off operational change while waiting for certainty. The two dynamics often feed each other, too, since organisations pour time into disclosures and mapping exercises precisely because operational priorities were never made clear in the first place.

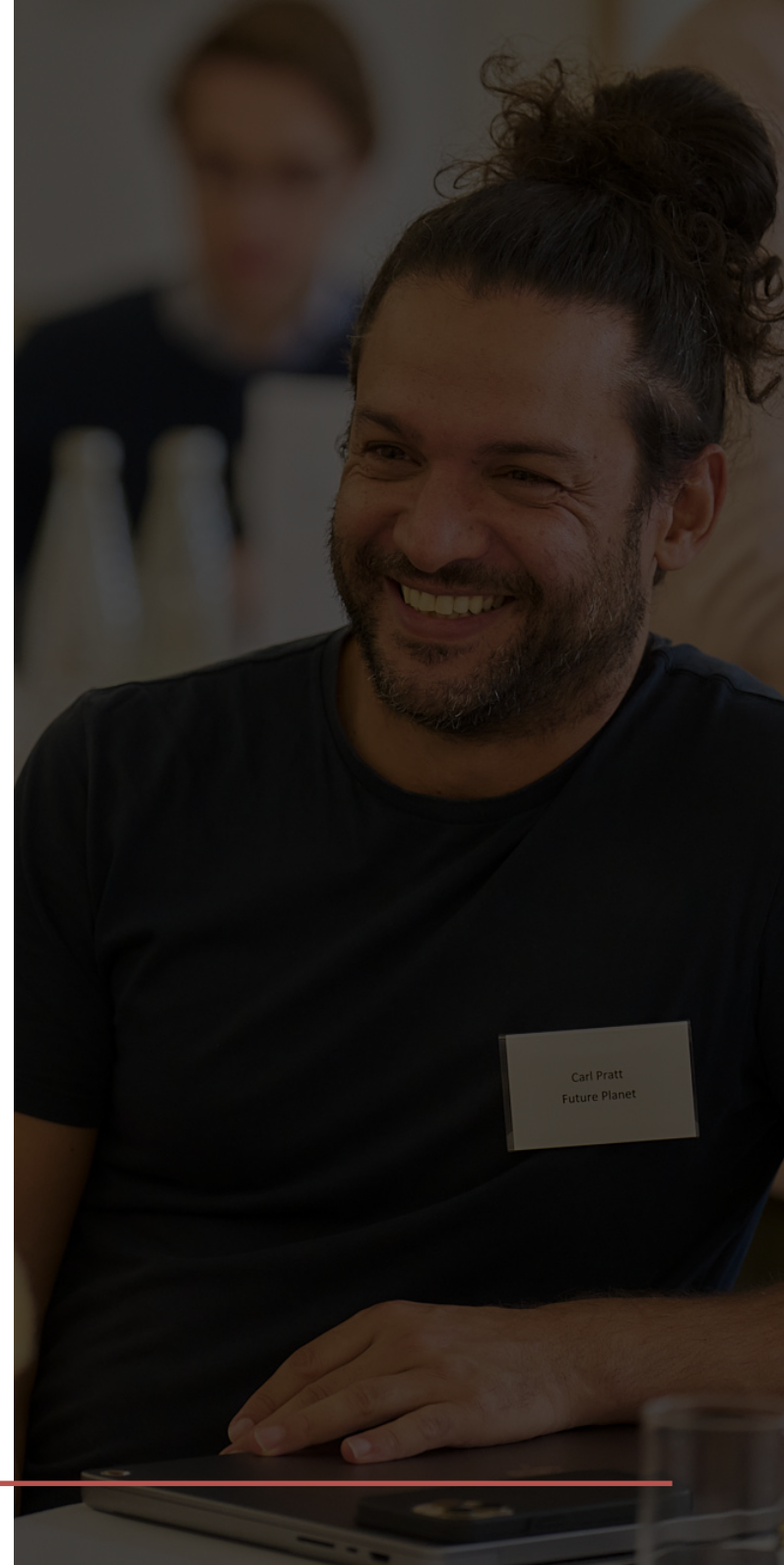
The common thread is treating measurement as a support system for implementation, not a standalone objective in its own right.

The Search for Perfect Visibility

The instinct for many organisations is to build a comprehensive dataset before deciding where to act. It's an understandable instinct, but it tends to backfire: **mapping exercises expand without limit, requests for ever more granular information delay real decisions, and teams lose the ability to tell strategically useful data apart from data that's simply available. For anyone new to the issue, it can produce a genuine deer-in-headlights paralysis.**

Part of this is structural rather than a failure of effort. Nature-related impacts don't standardise the way carbon does, and there's no single unified metric to fall back on. Biodiversity and ecosystem risks are highly context-dependent, data quality is uneven, and in plenty of areas the underlying datasets are simply incomplete. Supply chains compound the problem further, since the most material risks tend to sit furthest upstream, exactly where visibility is weakest and supplier data least reliable.

Internal pressure doesn't help. Teams are often pushed toward increasingly detailed analysis before anyone has clearly established what the operational priorities even are, which produces delay without much gain in strategic clarity. **The result, for many organisations, is a widening gap between ambition and operational confidence.**



The Limits of Measurement-Led Strategies

A strong caution runs through these conversations: measurement exercises risk drifting away from decision-making altogether. Significant effort often goes into data collection without ever establishing how that information will shape operational priorities, procurement decisions or risk management. This shows up most clearly around traceability and biodiversity indicators, where organisations can get stuck in cycles of continuous assessment while operational interventions barely move.

As one attendee of the October 2025 convening put it, this is “**mistaking measurement for progress.**”

Frameworks and disclosure mechanisms carry a version of the same risk if treated as substitutes for implementation rather than aids to it. **TNFD and SBTN both provide real structure.** TNFD’s LEAP approach helps organisations prioritise where deeper analysis is actually worth doing, rather than chasing simultaneous visibility across every operation and supply chain, and SBTN methodologies are useful for focusing attention on the areas of greatest ecological pressure and organisational influence. But neither tool decides operational priorities on an organisation’s behalf.

Sooner or later, organisations still have to decide:

- 1 Where to focus
- 2 Which suppliers or regions to prioritise
- 3 What level of risk is acceptable
- 4 Where intervention is feasible
- 5 How to allocate limited resources

These are decisions that can't always wait for complete datasets. The purpose of data was never completeness for its own sake. It's to support better decisions. Measurement that doesn't feed prioritisation and action is just a standalone exercise, however it's framed.



Working with Imperfect Data

Pragmatism is what keeps implementation moving. Rather than waiting for comprehensive primary data collection, many organisations start with proxy indicators, existing sourcing knowledge or publicly available datasets, and prioritise known high-risk commodities or regions before attempting anything organisation-wide.

It also turns out organisations already know more than their formal data suggests. Procurement teams often already understand where sourcing is unstable. Operations teams are usually aware of water stress, declining yields or supplier vulnerabilities long before it shows up in a report. Commercial teams can often see exactly where ecosystem disruption creates business exposure. As one nature practitioner summarised it: **“We know more than we think we do.”**

Perfect precision is rarely required to identify where the risk, or the operational relevance, actually sits.

Proportionality matters here too, since not every decision needs the same depth of evidence. Major capital investments or strategic sourcing shifts warrant detailed assessment; prioritisation exercises or early-stage engagement often don’t need much more than directional information. And confidence tends to build through the doing: operational engagement, supplier dialogue and pilot projects generate insight that desk-based analysis alone never will. As attendee of the 2025 event put it, **“we’ve all read a lot of PDFs and watched a lot of webinars, but at some point you still have to decide what to do.”**

Implementation and measurement, in other words, tend to develop together rather than one waiting on the other.

Confidence, Risk and Decision Making

Across sectors, nature-related measurement is increasingly framed as a risk management challenge rather than a purely technical one, and that distinction matters. Organisations already make strategic decisions under uncertainty all the time. Commodity pricing, geopolitical instability, supply chain disruption, regulatory change, none of it comes with complete information, and nature-related decision-making arguably calls for the same mindset.

Yet organisations often delay operational action simply because the underlying datasets feel incomplete, even when they already have enough directional information to identify where exposure likely sits. It's fair to ask whether expectations around certainty have simply become unrealistic. Traceability is where this shows up most starkly: complete upstream visibility may stay out of reach for many global supply chains for a long time yet, and waiting for it before engaging suppliers or assessing ecosystem risk risks delaying action indefinitely.

The more useful question isn't **“do we know everything?”** It's **“do we know enough to act responsibly?”**

Several organisations described this reframe, from certainty thresholds to confidence thresholds, as one of the more effective ways to cut through organisational paralysis.

Data as Organisational Infrastructure

Measurement problems aren't only technical. They're organisational. Nature-related data tends to sit scattered across procurement platforms, supplier databases, sustainability reporting tools, operational monitoring systems, geographic datasets and external disclosure processes, systems that, in most organisations, were never designed to talk to each other.

Aligning sustainability with procurement, finance, operations and technology is a common sticking point. Data ownership is often unclear, reporting structures vary by team, and even basic definitions don't always match. None of this is really about the complexity of nature as a subject; it's what makes implementation feel harder than it needs to be.

The organisations that make headway tend to focus less on building new data architecture from scratch and more on connecting what already exists. In some cases, fairly simple internal coordination improvements have delivered more operational value than far more sophisticated measurement tools. Being upfront about the limits of that data matters too. Nature-related datasets will likely stay imperfect for a long while yet, and organisations that are transparent about their assumptions, proxies and gaps tend to build more credibility, internally and externally, than those that aren't.

Building Measurement Maturity

Maturity here tends to follow a rough pattern. Early-stage organisations usually work with fragmented datasets, limited traceability and exploratory assessments. Intermediate organisations develop clearer prioritisation, stronger internal coordination, and closer integration between data and operational decisions. The most mature treat measurement as an evolving support system for implementation, rather than a fixed endpoint to reach.

Importantly, maturity doesn't mean achieving complete visibility. It's closer to growing confidence in making decisions despite the gaps. And that confidence tends to build through operational use, not theoretical completeness: organisations get better by acting, learning and adjusting, not by waiting until the picture is finished.



CONCLUSION

Nature-related measurement will keep evolving. Frameworks, datasets and methodologies are likely to improve substantially over the coming years. But organisations shouldn't expect to operate with complete certainty any time soon, and probably shouldn't wait for it.

The organisations making real progress aren't necessarily the ones with the most comprehensive datasets. They're the ones willing to combine imperfect information with practical decision-making, operational learning and a readiness to adapt as they go. Data matters, but treating perfect visibility as a prerequisite is just delay by another name. In practice, implementation tends to begin well before certainty does.

MORE GUIDES IN THIS SERIES

Moving towards a nature-positive future is a journey that goes beyond high-level commitments. This series of guides is designed to help your organisation navigate the path forward, offering the practical frameworks and clear insights needed to turn environmental ambitions into lasting, meaningful change

EMBEDDING NATURE INTO ENTERPRISE STRATEGY:

How to make the business case for nature

Making the business case for nature is seen as the most significant barrier to progress in corporate nature strategy. This practical guide is written for nature managers working inside large organisations to help build a business case that can win internal traction and buy-in.

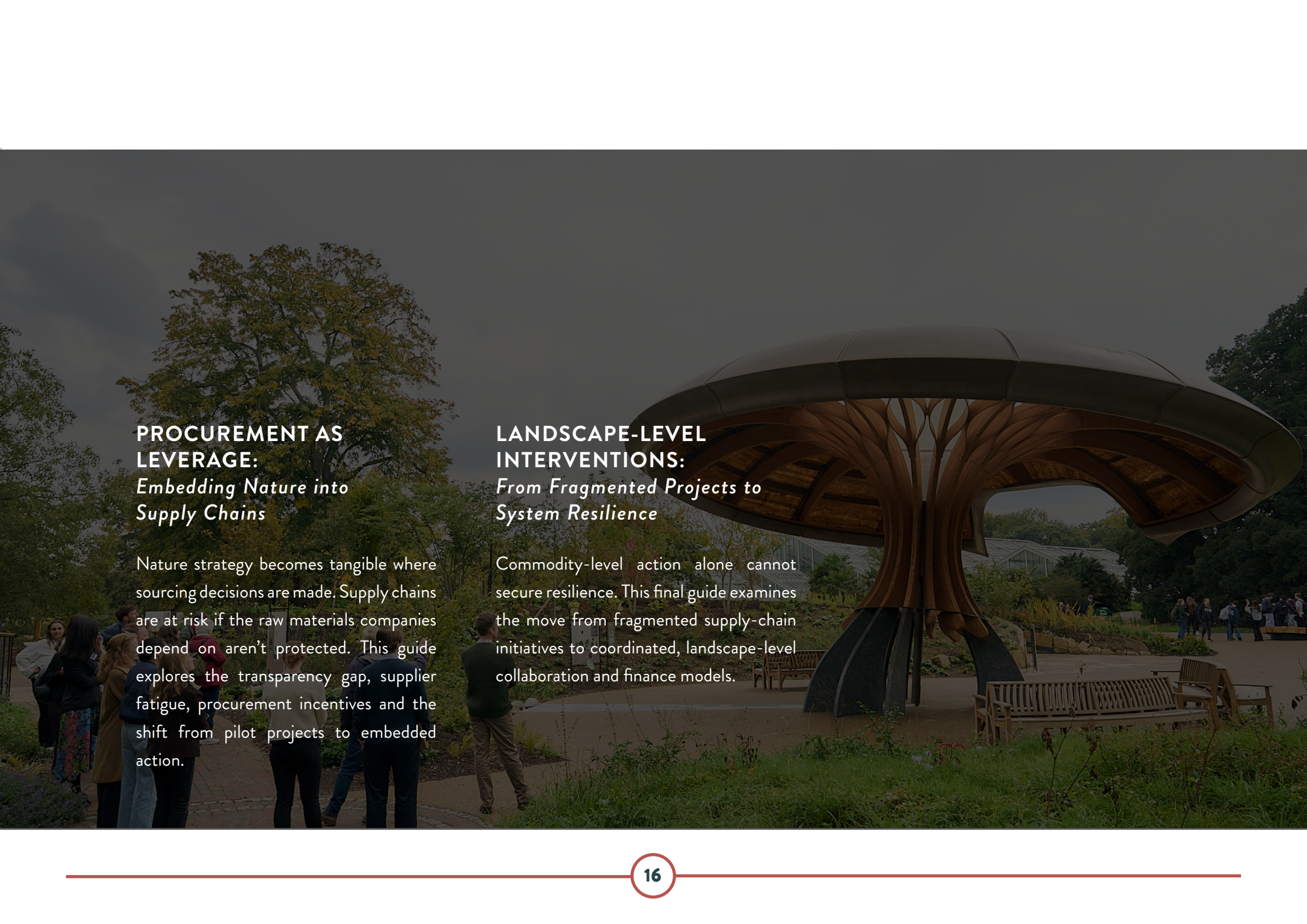
BEYOND CARBON TUNNEL VISION:

Integrating Carbon and Nature

In many companies, carbon and nature have been treated as parallel agendas. This guide examines why integration is now essential for resilience, how siloed approaches create blind spots, and how building nature work on the foundations laid by carbon can enhance business interests on multiple fronts.

FROM AMBITION TO IMPLEMENTATION: *Building Nature Strategies that Deliver*

Many organisations have commitments on paper but struggle with delivery. This guide explores the execution gap: impacts and dependencies, traceability, internal champions and strategic clarity.



PROCUREMENT AS LEVERAGE:

Embedding Nature into Supply Chains

Nature strategy becomes tangible where sourcing decisions are made. Supply chains are at risk if the raw materials companies depend on aren't protected. This guide explores the transparency gap, supplier fatigue, procurement incentives and the shift from pilot projects to embedded action.

LANDSCAPE-LEVEL INTERVENTIONS:

From Fragmented Projects to System Resilience

Commodity-level action alone cannot secure resilience. This final guide examines the move from fragmented supply-chain initiatives to coordinated, landscape-level collaboration and finance models.

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