mindful MATERIALS

2025 Data Ecosystem Report

A Connected Future for Sustainable Materials Decisions

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Executive Summary

A Connected Future for Sustainable Materials Decisions

The built environment is one of the most influential industries shaping our world—but the systems we rely on to make material decisions remain fragmented and disconnected, and are wasting resources for us all. Despite increasing demand for sustainable products, the data we need to make informed choices is still hard to find, harder to use, and nearly impossible to scale.

The mindful MATERIALS 2025 Data Ecosystem Report introduces a clear and actionable path forward: a nonprofit-led, connected Data Ecosystem grounded in the Common Materials Framework (CMF).

KEY OUTCOMES OF THIS WORK INCLUDE:

- Embed sustainability data directly into decision-making workflows
- Standardize and connect impact data across platforms
- Link financial and climate/human-related risk to material selection
- Expanding CMF adoption across the built environment

At the center of this Ecosystem are manufacturers—the “Givers” of product data—and the tools used by designers, owners, contractors, and certifiers—the “Receivers.” The Data Ecosystem v1.0 will create the technical and organizational infrastructure to connect these dots: from product to project, from intention to implementation.

”Data in itself is not the end goal—the end goal is a secured and scalable foundational infrastructure, the connective tissue that powers a smarter, more connected, and more responsible built environment. Where everyone saves time, money, and energy.”

— Annie Bevan, mindful MATERIALS

Why This Matters

Right now, the industry is wasting time and resources managing sustainability data that is siloed, inconsistent, and often unverified. This system slows progress, increases risk, and limits our ability to meet today’s climate, health, and equity goals.

The solution? A shared, structured, and scalable approach to data that flows—seamlessly, consistently, and securely—across the value chain.

WITH A CONNECTED DATA ECOSYSTEM IN PLACE, WE CAN:

- Save time and reduce redundancies
- Increase trust and transparency
- Enable smarter, faster decisions
- Future-proof projects and portfolios

Our Ask

This work is being led by nonprofits like mindful MATERIALS (mM), Health Product Declaration Collaborative (HPDC), Living Future, and Building Transparency, among others—organizations committed to open sourced, neutral, and scalable solutions now and into the future. But to accelerate this vision, we need broader industry support.

We’re calling on owners, developers, A+D professionals, manufacturers, ecolabel/standard organizations, tech platforms, and other built environment stakeholders to invest in this shared infrastructure—to achieve our shared goals.

To get involved, contact outreach@mindfulmaterials.com.

The Problem

The built environment shapes our world—driving global economic activity and meeting one of humanity's most basic needs: shelter. But despite its scale and influence, the industry still lacks the tools, alignment, and infrastructure to make responsible product decisions at scale.

What stakeholders want is clear:

- Building owners need reliable data to future-proof portfolios, evaluate durable cost savings that balance financial and environmental impact to satisfy executive and investor expectations.
- Architects, designers, and engineers need it to be easier to make informed product specification decisions without disrupting workflows.
- Contractors need clear and consistent product guidance to streamline construction and reduce delays.
- Manufacturers need clarity on how to prioritize investments and prove ROI.
- Technology providers want to integrate standardized sustainability data to accelerate tool functionality and meet industry needs.
- Certification bodies need consistent signals to increase the visibility, use, and trust of their labels.

But here's the disconnect:

Sustainable product data today is fragmented, inconsistent, and nearly impossible to act on. Product certifications are siloed. Requirements vary project to project. Digital tools don't speak the same language. And despite everyone's best efforts, the tools to make smarter, aligned decisions remain just out of functional reach—leading to inefficiencies, duplicated effort, and stalled progress across the value chain.

This isn't due to a lack of will—it's due to a lack of connection.

As an industry, we've made real progress in reducing the operational footprint of buildings. But we're only beginning to confront a far greater challenge: the impacts of the products that make them. Fortunately, we now have a clear path to address these challenges—one that connects to financial valuation, mitigates risk, and enables smarter decisions across the project lifecycle.

It's time to accelerate to this future, together.

What We Are Ultimately Seeking to Achieve

We are seeking to connect the financial investment and risk models of the built environment with sustainable impact reduction through a digital Data Ecosystem. By embedding climate and human-related risk data into investment decisions, we're not only safeguarding financial outcomes and increasing valuations but also accelerating the reduction of environmental and social impacts in one of the world's most influential industries.

KEY OUTCOMES OF THIS WORK INCLUDE:

- Unlocking climate and human-related risk data at scale
- Quantifying the holistic impacts of materials and products in projects
- Understanding what materials and products meet organizational-level requirements
- Scaling organized impact data into workflows
- Driving widespread Common Materials Framework (CMF) adoption throughout the built environment value chain

Together, we're redefining how buildings are valued—by both their financial returns and their contributions to people and the planet.

In a world where buildings are no longer valued solely by their square footage, location, amenities, or energy use; data plays a critical role in making material impacts visible, measurable, and actionable at scale.

Data's Role in Achieving this World

Data is the bridge between ambition and action.

In a world where buildings are no longer valued solely by their square footage, location, amenities, or energy use, data plays a critical role in making material impacts visible, measurable, and actionable at scale. It transforms sustainability from an aspiration into a business imperative.

Data helps us quantify what matters—not just operationally, but the full environmental, human, and social footprint of the products that make up our buildings. It enables architects, designers, and manufacturers—alongside investors, owners, and developers—to understand risk, assign value, and make informed decisions that align with both financial performance and reduction targets in a fully functional Data Ecosystem. Everyone in this fully functional Data Ecosystem is saving time, energy, and resources across the value chain.

Without organized, standardized, and scalable data, sustainability remains fragmented and inefficient.

With it, we can:

- Embed climate and human-related risk into investment strategies
- Drive accountability across the supply chain
- Ensure product selection aligns with organizational goals
- Scale meaningful impact reduction across workflows and portfolios

Data is not the end goal—it's the connective tissue that powers a smarter, more responsible built environment. It allows us to speak a common language, track progress, and ultimately redefine what it means for a building to perform—financially, socially, and environmentally.

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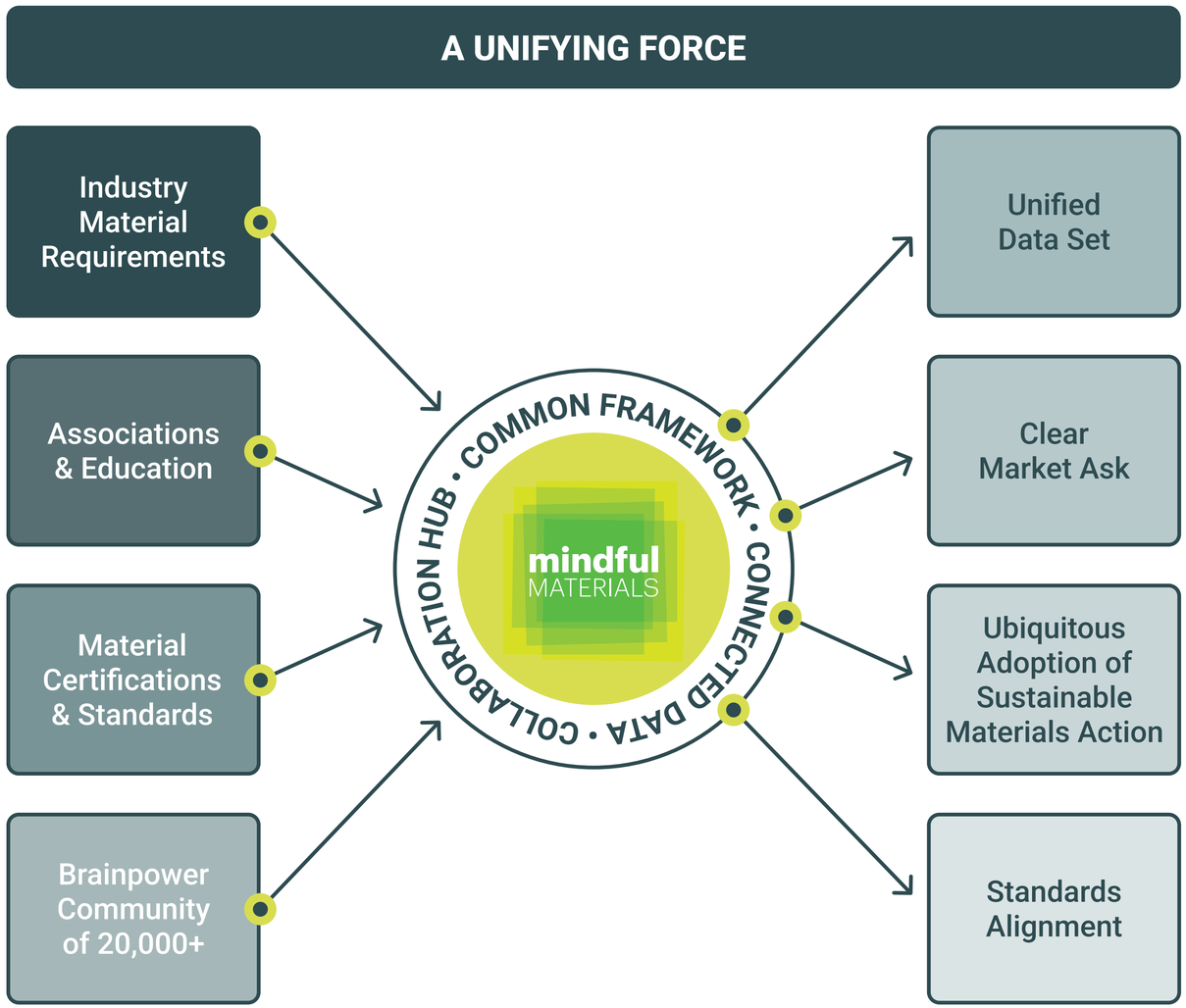
Background of mindful MATERIALS

mindful MATERIALS (mM) is a 501(c)(3) nonprofit built by and for the building industry. Its mission is to make specifying and using better materials easier, more practical, and less impactful—for people, projects, and the planet.

As a champion of collaboration and sustainable products, mM is uniting stakeholders across the entire built environment value chain—including architects, designers, manufacturers, contractors, owners, ecolabel standard organizations, technology platforms, and other Non-Governmental Organization (NGO) partners—around a shared goal: to accelerate a common language for sustainable building products to scale a digital Data Ecosystem. So that we can embed sustainability into the way we evaluate and select materials in workflows.

mM is leading a critical shift in the industry: from siloed efforts and fragmented data to aligned action through shared standards. At the heart of this work is the CMF—a unifying structure for understanding the holistic impacts of building products. By advancing CMF adoption through strategic partnerships, convening cross-sector Forums, and fostering data interoperability, mM helps turn complex information into actionable insight.



Learn more about our work ⟶
Learn more about those making it happen ⟶

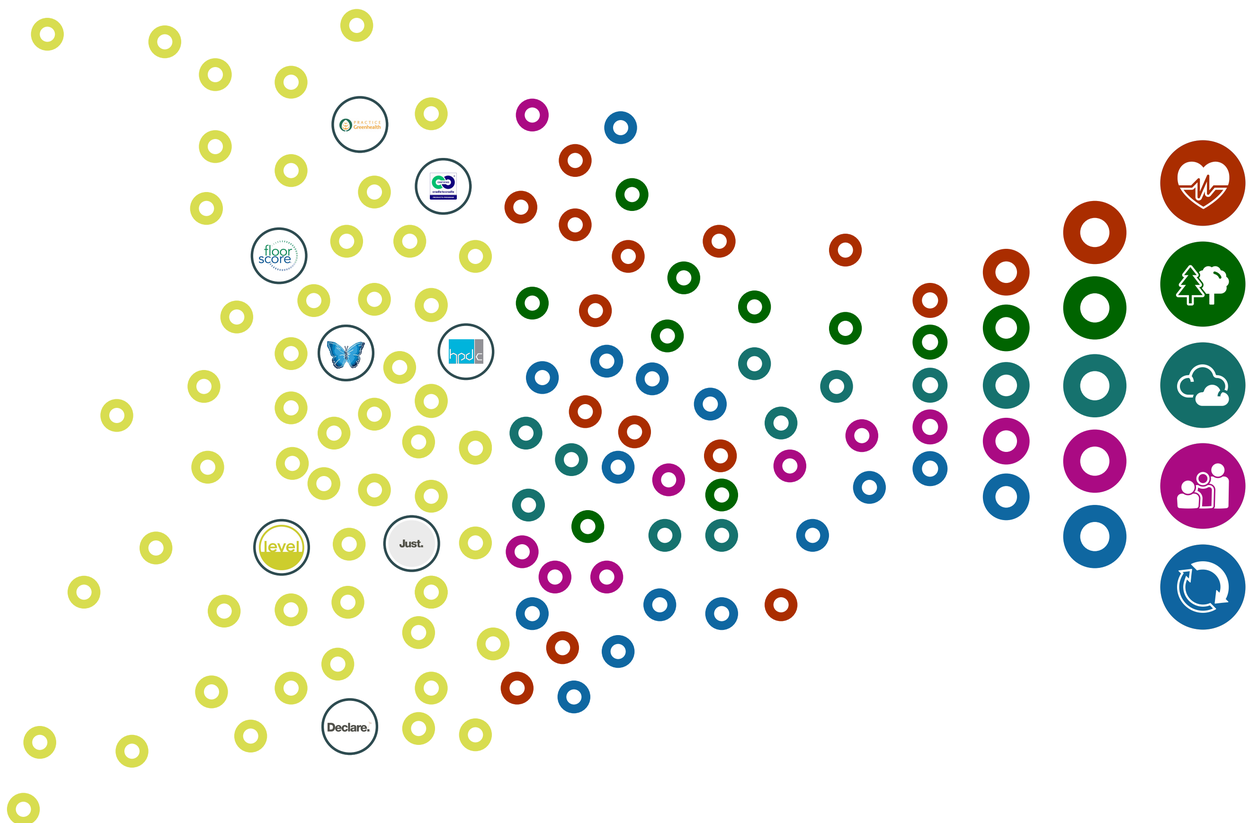
Background of Common Materials Framework

The CMF is a shared language for product sustainability—designed to bring clarity and alignment to a complex, fragmented landscape.

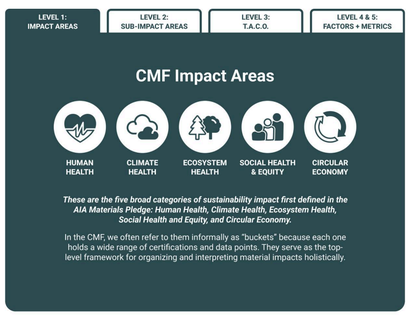
It doesn't replace existing certifications or standards. Instead, it provides a consistent structure to organize product sustainability certifications/ standards and the data certified within them around five core impact areas: climate health, human health, ecosystem health, social health and equity, and circular economy. This structure makes it possible to map any of the 100s of ecolabels and 1,000s of data points into impact—making it easier to compare, communicate, and act on that information.

Right now, we're chasing shared goals with siloed tools, inconsistent language, and limited impact. The CMF changes that. It cuts through confusion, reduces redundancy, and enables manufacturers, designers, and project teams to work from the same playbook, written in the same language—unlocking more meaningful progress across the value chain.

From a high level, the CMF is deceptively simple: it organizes the thousands of data points found in over 150 commonly used certifications, standards, and ecolabels into five aligned impact buckets.



Recently, mM and our Forum Members co-created the CMF Prioritization v1.0, helping to synthesize and streamline the most important impacts, certifications, and data for the industry to focus on now and through the next three years. As described in the Appendix, the CMF Prioritization v1.0 and other tools/resources co-created by the mM Forums will be continuously updated to ensure they align with standards and data as the industry continues to evolve.



What is the Data Ecosystem?

To scale impact, we need more than quality data—we need a smarter, more connected system for how that data moves across the value chain.

That's what the Data Ecosystem is building. It's not about starting from scratch—it's about connecting what already exists through a common language and shared communication infrastructure, so sustainability data can flow from source to workflow.

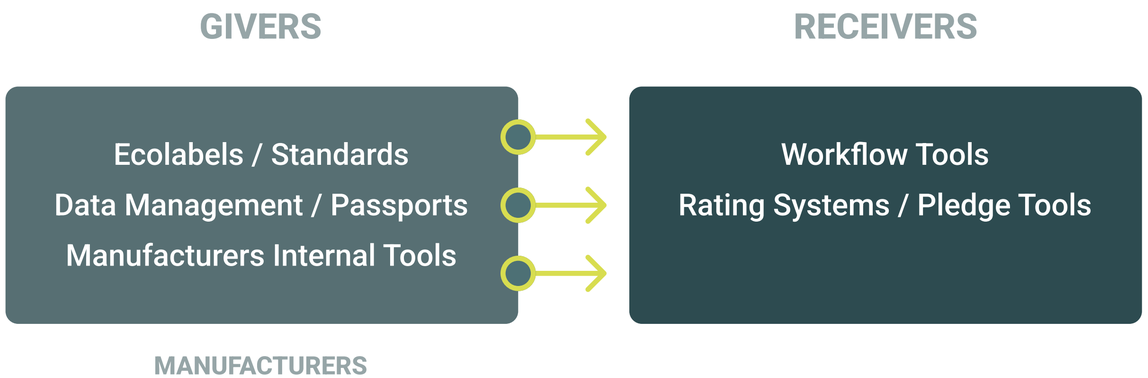
At the heart of this Ecosystem are the "Givers"—and the "Givers" are always manufacturers.

Manufacturers are responsible for creating and sharing their product sustainability data. But the way they give that data can vary, including:

- Through ecolabels and standards, like Health Product Declarations (HPDs), Environmental Product Declarations (EPDs), Declare labels, etc.
- Through third-party data management tools or material passports
- Through internal systems, such as PMDS, PIM, ERP, or platforms like Salsify, etc.

This digitized data—ideally third-party verified—is then connected to "Receivers" through Application Programming Interfaces (APIs) structured using the CMF.

"Receivers" include the project-level tools already in use by designers, contractors, and consultants—tools that rely on high-quality, organized data to support real-time decisions, specifications, and compliance.



WHAT THIS UNLOCKS:

- Structured, digitized data that is consistent, current, and easy to share
- Real-time access to product impact data across all five CMF impact areas
- Streamlined compliance to organizational material requirements without redundant uploads or custom data lakes
- Time, energy, and cost savings across all stakeholder groups
- A foundation for measuring material impact and ROI at scale

Current Market Realities of Data Ecosystem

In partnership, mM' Forum's Tech & Data Working Group and Strategic Planning Task Force have surfaced key barriers—and the proposed solutions (current and near future) needed to move the industry forward.

The following highlights Barriers and mM Forum-slated solutions (timelines for these solutions range near term and near future) to continue accelerating an interconnected Data Ecosystem, removing barriers and enabling quality data flows in workflows to scale sustainable product usage and reduce impact.

BARRIER	POSSIBLE SOLUTION
Each ecolabel/standard organization and manufacturer defines a "product" differently and applies its own naming conventions, leading to inconsistencies across platforms	Developed and universally adopted guidance to and by certification bodies and Tech Platforms (and adopted guidance to manufacturers) on how a "product" is defined
Manufacturer product names are inconsistent between ecolabel/standard/certifications/labels	Developed and universally adopted guidance to and by manufacturers, which enables them to provide ONE name to all to streamline "matching" capabilities between tech (and other types) organizations
Unverified or incomplete data prevents teams from using it effectively	Identify the fields, such as the CMF factors & metrics, from third-party verified sources, that the industry requires to maintain consistent and high-quality data (which can be accelerated by an adopted aligned ask).
Trying to solve everything at once	Create a "North Star," then scale, not letting perfection be the enemy of progress
Each building certification (and AEC/end user) has its own set of data requirements and reporting formats	Building certifications (and AEC/end user) align their material requirements with the CMF globally to streamline reporting
Ecolabel and standard organizations provide data to tech partners in different ways (API, PDF, spreadsheet), which causes inconsistencies	All ecolabel/standard organizations and workflow tools use an open-source CMF-derived data schema as part of their API integrations
With digitization demand being new, manufacturers have a limited knowledge set of data management best practices	Create best practices guidance for data management for manufacturers

What's Next: Introducing Data Ecosystem v1.0

The next phase of this work is about more than resources—it's about building the infrastructure for real transformation.

We've aligned on the CMF as a shared language and are accelerating its adoption. Now, we're bringing that structure to life through the development of Data Ecosystem v1.0—a coordinated, open approach to how sustainability data is digitized, connected, and activated across the built environment.

As mentioned above, at the heart of this Ecosystem are manufacturers, the "Givers" of data. In v1.0, we're establishing clear guidance on the pathways for those "Givers" to share digitized product data—whether through ecolabels, material passports, or internal systems. At the center of data connectivity acceleration will be the use of a CMF-aligned Data Schema. Leveraging the CMF Data Schema v1.0 enables a streamlined set of the most important ecolabel/standard and digitized data endpoints to flow more easily through APIs directly into the tools and platforms used by designers, contractors, owners, and certification bodies—the "Receivers". In turn, this work will help unlock real-time access to high-quality product impact information across the five CMF buckets.

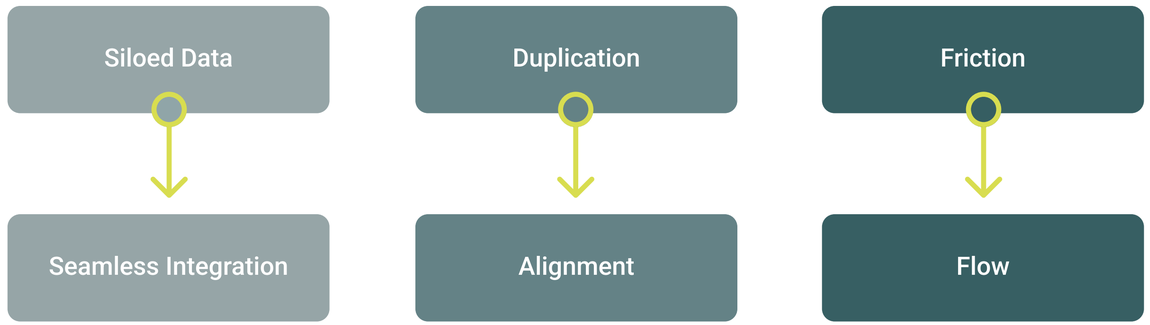
Additionally, we're collaborating the Large Firm Roundtable (LFRT) to ensure clarity of the functionality of various digital workflow tools to scale material program integration and success within firms and user organizations.

This year, and most likely near term, we're going to continue focusing on advancing connectivity. In the near future (beyond 2025), we'll focus on prioritizing third-party verified data to ensure quality and trust—while advancing to the next iteration of the Data Schema to keep pace with industry needs and enhance connectivity across the Ecosystem.

The Data Ecosystem won't form overnight—but connection by connection, it's becoming real, unlocking transparency, consistency, and smarter decisions.

Explore the Appendix for a preview of the tools and resources debuting at Greenbuild 2025 to help scale this work.

FUTURE STATE WE'RE UNLOCKING



What Does This Mean for You?

Data Ecosystem v1.0 is about embedding impact data into decision-making and workflow, not adding another layer of complexity. It ensures that the right data—organized by the CMF—shows up in the tools and platforms you already use.

Whether you're:

- A manufacturer managing product data across multiple systems
- A tech tool provider working to integrate sustainability data insights into functionality
- An architect, designer, contractor, or owner trying to make better material choices

This is the structure that will make it easier to act—and harder to miss the mark.

Each component of this Ecosystem is being co-developed with industry task forces to reflect current realities and deliver scalable, practical impact.

Accelerating Impact Through Support

Building the connected Data Ecosystem our industry needs requires more than alignment—it requires sustained investment in the nonprofit organizations leading the development of its foundational functions.

Despite progress from a few nonprofit-led platforms, the majority of third-party verified data in the built environment is still buried in PDFs and spreadsheets—unstructured, inconsistent, and disconnected from the workflows where it's most needed. Even where digitized data exists, formatting inconsistencies and incomplete fields make it hard to rely on any single source for usable, scalable insights.

Unlike for-profit platforms, which are often incentivized to silo or monetize data, and are funded by outside means like VC investment, nonprofits like mM, HPDC, Living Future, and Building Transparency, among others, are focused on creating open, trusted, and scalable solutions—designed to serve the entire industry for decades to come.

That's the gap. And closing it is the work that lies ahead.

The work outlined in this report is already underway and provides significant value to all stakeholders through time and money savings at scale.

But to fully realize the promise of Data Ecosystem v1.0, we need more than incremental progress—we need to tackle the systemic barriers that continue to limit access, integration, and impact.

With additional funding from all stakeholders in the built environment, we can accelerate the solutions that will close that gap:

- Strengthening and scaling shared technology infrastructure
- Expanding cross-platform integrations
- Reducing friction and wasted time across the value chain
- Empowering better, faster materials decisions at scale

Current Problems, Future Ideal State Solutions

The table below outlines three foundational challenges and the big-picture solutions required to overcome them. These are the fundamental shifts required to finally break through the bottlenecks holding our industry back—and unlock the full potential of a connected, transparent materials data ecosystem.

BARRIER	POSSIBLE SOLUTION
No Universal Unique Identification (UUID) to easily connect certifications to a single product.	A UUID system, established and administered by nonprofits, that is integrated and used across the value chain, streamlining and scaling digitized data connectivity.
With no single aggregator of data, all tech platforms and third-party verifiers (3PV) must establish individual API connections.	A nonprofit-owned and managed impact data hub that collects data from "Givers", aligns it to the CMF, and offers a single API that workflow tools ("Receivers") can utilize.
For-profit business models do not support the longevity of shared data infrastructure.	Large-scale funding or crowdfunding support for nonprofit-led tech and data management, ensuring infrastructure remains open source, neutral, and accessible into the future.

"This is the hard work—the behind-the-scenes infrastructure that doesn't come easy, but makes everything else possible. It demands investment, long-term collaboration, and shared trust. It's not the flashiest part of progress—but it's the foundation that ensures data works for everyone, not just the few with the most resources."

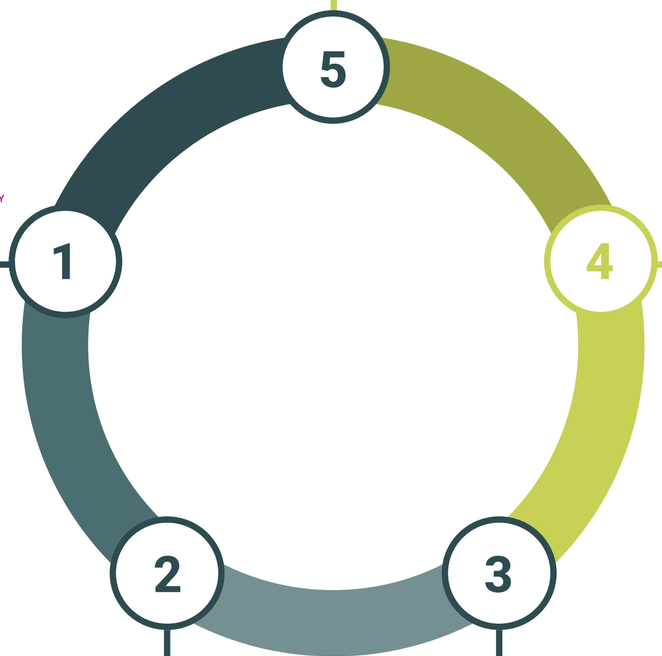
— Annie Bevan, mindful MATERIALS

Bringing It All Together

Driving the proliferation of cleaner, complete data.

An Evolving Framework for Holistic Sustainability

The mM CMF is a key mechanism for pre-competitive alignment on materials strategy, acting as an organizational rubric for sustainability data. Its digitization enables consistent understanding of how certifications and standards support impact and adoption drives industry alignment.



Industry Sends Clear, Aligned Signal

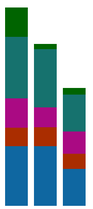
Industry publicly signals unification via adoption of the CMF; releases aligned resources; and establishes aligned CMF ‘data set’ demand (evolving over time) providing clear data quality + completeness needs to support project consideration.

Manufacturers Clean & Pursue ‘mindful’ Data Set

Manufacturers work to gather the ‘mindful’ data set signaled by Forums. Early adopters work to clean up their data sets; delayed adopters pursue necessary standards and certifications.

Project Measurement & Impact Reduction*

Complete, quality product data in a common format means better product decisions and better buildings. From there, Users can better establish benchmarks (good, better, best), score buildings, compare progress and use workflow tools to reduce embodied building impacts.



Feedback, Innovation & Standards Alignment

Growing use of the CMF pushes standards to align and workflow tools to adopt the CMF to allow benchmarking and measurability. Manufacturers see meaningful ROI trends for sustainability investment, and product innovations shift availability.

*THIS STEP IS ENABLED BY MM WORK, BUT OUTSIDE ITS WORK PRODUCT

Join Us

This is a collective effort, and we can't do it alone. We invite owners, developers, architects, designers, and manufacturers—every stakeholder in the built environment—to partner with us and ensure this Ecosystem has the resources it needs to succeed.

The industry can't afford to wait. Nonprofits like mM, HPDC, Living Future, and Building Transparency (among others) are already building the backbone of a transparent Data Ecosystem—but without sustained support, progress will remain piecemeal.

Let's accelerate the solutions that will transform how materials impact is measured, shared, and acted upon.

Join us in funding the future of materials transparency—reach out to outreach@mindfulmaterials.com to partner with us.

The future of materials depends on collective action and your shared support.

Appendix

CMF Implementation Toolkit (Coming Greenbuild 2025)

The Toolkit will include:

Endorsement Language & Resources

- Consistent messaging for both manufacturers and end users to request and supply CMF-aligned data
- A refreshed CMF webpage with glossary, FAQs, reference guides, and CMF 101 videos
- An updated CEU to expand industry-wide understanding

Data Ecosystem Resources & Guidelines

- A harmonized, open-source Data Schema developed by the Data Ecosystem Connectivity Task Force
- Integration guidance for AEC/O workflows and software tools
- Manufacturer-focused guidance from the Data Management for Manufacturers Task Force

Ongoing CMF Governance & Brand Alignment

- CMF usage guidelines
- A CMF governance and maintenance schedule

Support for Materials Requirements Programs

- Clear guidance for AEC/O professionals to build and align internal materials programs to consistently use the CMF

Ongoing Commitment

mM is committed to timely updates on the toolkit, data ecosystem progress, and CMF governance—ensuring transparency, collaboration, and accessibility every step of the way.

Portal Transition to Accelerate Data Ecosystem

Since 2023, the mM' Product Portal, powered by ecomedes, has served as a critical proof of concept. It demonstrated how digitized, impact-oriented product data—organized by the CMF—can support better decisions across the built environment. It made sustainability data more searchable, filterable, and meaningful by allowing users to explore products through CMF-aligned impact areas and sub-buckets.

But the Portal was never the final destination. It was a starting point.

On August 4, 2025, the Portal sunsetted as we move into a new, more powerful phase: CMF, everywhere.

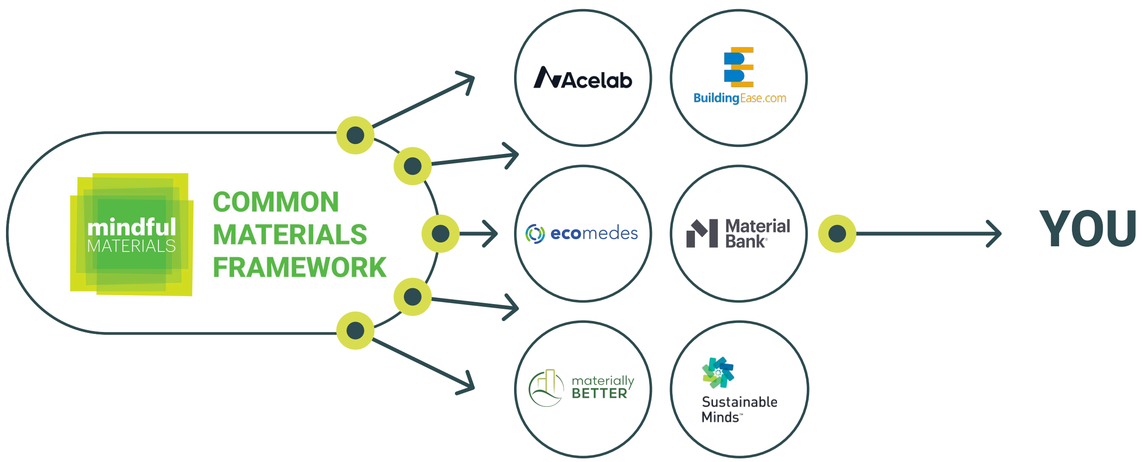
The goal is no longer a single access point. It's an integrated Ecosystem, where the CMF is embedded directly into the tools and workflows where material decisions are made every day. By aligning platforms to a shared structure—and ensuring high-quality, interoperable data flows between them—we accelerate action and unlock real, scalable impact.

This is where the CMF becomes more than just a framework. It becomes the foundation for industry alignment, enabling:

- Seamless, digital asks and gives of material sustainability data
- Consistent, CMF-aligned product evaluation across platforms
- Better comparisons and deeper insights across impact areas
- Less redundancy, more efficiency, and broader progress across the value chain

This next chapter isn't just about retiring a tool. It's about realizing a vision: a connected Data Ecosystem that supports transparency, streamlines decisions, and empowers every stakeholder—from specifier to supplier—to act with confidence and clarity.

The CMF and its integration into real workflows are what will turn our shared goals into shared outcomes. This is how we scale sustainability—together.



Types of Data in Circulation

Today, sustainability data from manufacturers and third-party verifiers exists in a mix of formats, each with varying levels of usability and scalability. To fully enable a connected data ecosystem, we must go beyond quality—we need data that is digitized, structured, and connected to real-world workflows.

HERE'S A BREAKDOWN OF THE TYPES OF DATA CURRENTLY IN CIRCULATION:

PDF-Based:

Most certification data today still lives in static formats—spreadsheets or PDFs—hosted on manufacturer websites or ecolabel portals. While some certifying bodies now offer APIs to retrieve these documents more efficiently, the data inside them remains unstructured and difficult to act on.

Digitized Data:

Some verifiers and data management tools have begun to digitize key information, organizing it into fields that follow a structured format. However, much of this data is still isolated—requiring users to manually access or interpret it.

Digitized and Connected Data:

This is where true impact becomes possible. A few platforms—like Building Transparency's EC3 tool, HPDC's Material Health Tool Suite, and Living Future's Declare database (powered by 3E Exchange)—are delivering structured, CMF-aligned data that's connected via APIs directly into workflow tools.

These three nonprofit-led solutions represent a strong foundation, particularly in the Climate Health and Human Health buckets of the CMF. Others, such as Living Future and Cradle to Cradle Certified (C2CC), are actively evolving their infrastructure to support deeper integration.

THE TYPES OF "GIVERS" CONTRIBUTING DATA TODAY INCLUDE:

Ecolabels/Standards providing APIs that return PDFs or, in some cases, structured data endpoints

Data Management/Material Passport services, like Ecomedes and 3E Exchange, that help manufacturers organize and share their data

Manufacturers themselves, leveraging internal tools such as PMDS, PIM, ERP systems, or platforms like Salsify to manage and distribute product information

To build the Data Ecosystem v1.0, we must increase not only the quality of sustainability data, but also its structure, standardization, and connectivity—so it can flow seamlessly from "Givers" to "Receivers" across the industry.

Status Check

While digitization efforts are underway, most third-party verified data in the built environment remains locked in static formats—making it difficult to access, apply, or scale. Only a few nonprofit-led platforms have moved beyond digitization to also offer structured, connected data that integrates directly into project-level workflows.

Currently, the most advanced examples of digitized and connected data come from:

- Building Transparency (via EC3)
- HPDC and its Material Health Tool Suite
- Living Future Institute's Declare Database, powered by 3E Exchange

These platforms provide robust data endpoints that align with the CMF, particularly within the Climate Health and Human Health buckets. Others—like Cradle to Cradle Certified (C2CC) and Living Future—are actively advancing their technical infrastructure to support deeper integration, but overall, truly connected, CMF-aligned data remains limited.

As we continue building the Data Ecosystem, expanding the availability and connectivity of third-party verified data will be essential to realizing its full potential.

What We Know: Current Data Realities make Data Ecosystem Expansion Challenging

As the Data Ecosystem expands, it's important to acknowledge the realities and inconsistencies that make alignment and integration challenging. While many certifications organize product information by CSI divisions, they differ in how that structure is formatted and delivered—creating friction when standardizing data across platforms.
Basic manufacturer fields—such as company name, website URL, or contact information—are often included, but not always consistently populated or structured. Similarly, some certifications provide material composition data in clear, structured fields (e.g., Declare's substance disclosures), while others embed this information in less accessible formats.

In most cases, the data available digitally reflects what's visible on the label—but field completeness and formatting vary, even within a single program. For example, optional data points like product URLs or Declare's embodied carbon indicator are not always filled out, even when the field exists. This variability limits the ability to rely on any single certification as a source of complete, structured, and interoperable information.

The visual below outlines a technical breakdown of the current digitization and connectivity progress across three leading nonprofit platforms: Living Future, HPDC, and Building Transparency's EC3.

Declare

No schema explanation

Limited nested attributes

No field for total disclosed %, only shows up per substance

Has three ID sections (ID, Declare label unique ID, and Living Future Declare ID), which are all different

Includes minimal LPC information

Majority of the data can be found on the label, although there are times when it only shows on the website with some overlap

HPD

Partial outline of API schema available at https://research-api-docs.hpd-collaborative.org/2.3/

Includes 2 IDs (ID and Unique ID) with different lengths

Verifier is not always shown on the HPD PDF, but is in the data

Has more nested attributes than Declare

Substance information can live in either "content in descending order of quantity" or "data_pdf_v23" or sometimes neither

EPD*

The review was based on the EPD (Full with Refs) Schema that is provided through Building Transparency's open EPD API

Received as a structured API with a hierarchy

There are items that are required to be included, and provide a specific format to follow and descriptions for consistent information

Has the most nested attributes, which are difficult to navigate

Includes allowable values on how the data was generated (API, PDF, web) to gauge its reliability

Has a read-only note about including the ID from the open-xpd-uuid-cqd.io/register, although website not found. There are a few ID options available to include.

Includes detailed data necessary per material type.

Of the EPD PDFs, the majority of the information is available within the data.

*only reviewed open EPD fields, not full products

Glossary/Terms

API (Application Programming Interface): A set of rules and protocols that allows different software systems to communicate with each other.

In the context of this work, APIs enable sustainability data to flow between platforms—connecting manufacturer data to project-level tools and ensuring it's available where decisions are made.

CMF Prioritization v1.0: CMF Prioritization v1.0 is the bridge supporting common materials language & practice to move from theory to action. This prioritization reflects what is ready, what is needed, and what is possible—right now—for streamlining sustainability data across the value chain. Click here to explore the CMF Prioritization v1.0.

Data Ecosystem: A connected, interoperable system where material sustainability data can move efficiently from source to action.

The Data Ecosystem we're building integrates third-party verified data, manufacturer data systems, and project-level tools using the Common Materials Framework (CMF) as a shared structure. It enables consistent, high-quality data to flow across the value chain—cutting redundancy, improving clarity, and unlocking scalable impact. It doesn't replace existing platforms—it connects them.

Digitized Data: Sustainability information that has been transformed from analog or document-based formats (like PDFs or spreadsheets) into structured, machine-readable formats.

Digitized data is essential for automation, comparison, and integration into digital tools and workflows. It's what allows information to be easily shared, searched, and analyzed across platforms.

Data Management Product Passport: A digital home base for a product's data. Used by manufacturers, a Data Management Product Passport stores and organizes critical product info, especially third-party verified sustainability data, in a consistent, structured format. It makes it easier to share that data with other tools and platforms, acting as a single, connected source of truth across the ecosystem.

Schema: A data schema is a structured framework or blueprint that defines how data is organized, labeled, and related to each other—so that it can be understood and shared consistently across different systems. mM's Data Schema will be in JSON formatted language.

Tech (Technology): A broad term used to refer to software platforms, digital tools, systems, and infrastructure that help collect, manage, share, and apply data.
In our context, "tech" includes everything from product databases and certification platforms to workflow tools used by designers, manufacturers, and contractors.

Third Party Verified (3PV): Third-party verified data is information that has been independently assessed and validated by an impartial organization, separate from the manufacturer or seller. This process ensures that product claims—such as environmental or health impacts—are accurate, credible, and aligned with recognized industry standards. Third-party verification is essential for building trust across the value chain, as it eliminates bias and provides confidence that the data can be reliably used for decision-making.

Value Chain: The full lifecycle of a building product—from raw material sourcing, manufacturing, and distribution, to specification, installation, use, and end-of-life. Each stage is connected, each stakeholder plays a role, and every decision adds value (or impact).

Workflow Tools: The digital tools teams use every day to get projects done, like spec platforms, procurement systems, construction software, and certification trackers. These tools support decisions, documentation, and collaboration throughout the building lifecycle. When connected to sustainability data, they help architects, designers, contractors, owners, and certifiers make more informed, impact-aligned choices—without disrupting how they already work.

In Gratitude

This vision for a connected, transparent Data Ecosystem isn't ours alone, it's been shaped by the collective effort of so many across the built environment. Thank you to the individuals and organizations who continue to turn possibility into progress.

Strategic Partners
To the organizations helping co-develop the infrastructure and ideas behind this work—thank you for your leadership and commitment to alignment.

Forum Members & Task Forces
To our Forum members—especially those in the Tech & Data Working Group and the Advocacy & Awareness Working Group—thank you for your time, honesty, and vision. Your insights have helped uncover what's possible.

About the Forums ⟶

Members & Advocates
To our members and champions who show up, speak out, and push for better—thank you for helping drive this movement forward, one connection at a time.

Board of Directors
Thank you for your ongoing support of mindful MATERIALS and our mission to scale impact through transparency and collaboration.

Our Team
To Annie Bevan, Anthony Guerrero, Laurel Chadzynski, Taylor Friehl, Jen Levisen, Jen Collins, and Lauren Bobyock—thank you for your creativity, focus, and dedication. This report, written by Annie Bevan, Jen Levisen, and Jen Collins, and designed by Taylor Friehl, reflects your knowing of what's possible.

This is just one step. Thank you for taking it with us, and for helping shape the path ahead.

"Data in itself is not the end goal—the end goal is a secured and scalable foundational infrastructure, the connective tissue that powers a smarter, more connected, and more responsible built environment. Where everyone saves time, money, and energy."

— Annie Bevan, mindful MATERIALS