



The Common Materials Framework: Sustainability. Structured for Impact.

**June 2022** 

An Overview + Introduction to the CMF

## The Common Materials Framework: Sustainability. Structured for Impact.









### Overview + Introduction

The Common Materials Framework is a centrally-managed, industry-led resource, designed to rapidly accelerate progress to make and adopt products that are transparently disclosed and holistically optimized for sustainability.

Unpacking and organizing sustainability data from over 100 existing standards and labels is deceptively simple in concept.

In reality, building a cross-stakeholder coalition to research, structure and review the mapping of over 650 sustainability factors from over 100 certifications, within 5 'buckets' of sustainability has been a massive industry-led effort and achievement to-date.

Even just the process and technical output of building the Common Materials Framework has had immense value.

What comes next for the framework, however — digitization in the mindful MATERIALS library; integrations across multiple supply chain, product and building platforms and technology solutions; using gap analyses to address missing sustainability factors; plus resources and education to drive consistent adoption and informed decision-making, will turn this critical resource into a transformational tool.

On the next pages, you'll find a timeline of what we're working on with industry partners to drive better products and benchmarks of progress using a consistent foundation, FAQs about the CMF, visuals of the framework and information about who built it and how.

# **CMF TIMELINE:** What's in the works for 2022?



- Complete research and organization of all CMF buckets
- Certification Body and Ecosystem Partner Review of CMF
  - Announce Completion of CMF v1 at AIA '22
- Adoption of CMF as metrics foundation by pledge stakeholders: AIA, ASID, Manufacturers Commitment
- Begin process of CMF digitization
- Technology and industry partner agreements for CMF use and adoption
  - Publish Quick Reference Guide for CMF users
- Publish Manufacturer Data Guide for using CMF as roadmap
- Release updated mM Library with improved UX/UI and CMF Smart Filter at Greenbuild Impact Summit
  - Partner with technology platforms to connect the use of the CMF seamlessly wherever product research and decisions are made in workflows.
  - Cont. improvement: leverage CMF to identify new/missing sustainability metrics; evolve CMF with industry progress and guidance; improve UX/UI to drive mindful decisions.

# **CMF FAQs:** For more FAQs, visit the <u>CMF page</u> on the mM website



### What is the CMF?

The Common Materials Framework (CMF) is the outcome of the most detailed cross-stakeholder industry effort to-date to analyze and organize **over 100 of the most common building product and material certifications and disclosures**. The framework gives structure to over 650 relevant sustainability factors identified within these programs. Those factors are organized within the 5 buckets of health and sustainability referenced across multiple stakeholder materials pledges, including the AIA A&D Materials Pledge.

By mapping the underlying data and organization of those Pledge statements, the CMF allows signatories of those pledges to navigate and demonstrate achievement on their public commitments.

Once digitized in the mM Library, the framework will act as a smart filter, allowing practitioners to search for sustainable products at any depth. Plus, the framework will seamlessly across all leading building and material databases and technology platforms, ensuring a consistent foundation of information wherever material decisions are made.

## Why do we need a Common Framework?

How would *you* define Circularity or Social Health & Equity for materials and use that definition to drive better decisions to make and specify products? Now ask the person sitting next to you — the answer is likely to be either entirely different, or at least slightly different. Those inconsistencies hold us back as an industry in driving change and measuring progress in reducing the material and embodied impacts of the built environment. The CMF solves that.

Or consider the task of updating, managing and educating product sustainability standards with new releases and changing versions for different product categories. The central framework maps these differences, evolving over time to integrate updates, helping practitioners navigate broad intent or nuances and plot a roadmap to better products.

### Is the CMF a certification?

No. The CMF is not a certification. The framework represents a meta-analysis and organization of all major material certifications and standards in the built environment. Its purpose is to identify all relevant sustainability factors and their benchmarks, and organize those factors within five buckets of sustainability.

By unpacking and mapping that information to a common structure that can be used as the foundation for decision-making metrics, by any professional across the built environment across multiple tools and databases, the framework drives consistency and allows for benchmarking progress and success in improving the holistic health of our built environment and reducing the embodied impacts of buildings.

## **Materials Pledge Meets Framework:** How the CMF supports the Pledges



Landfill-free, Greencircle Zero Waste

A&D Pledge Bucket Description		CMF Sub-Buckets	Example Programs + Standards Referenced (full list to be released with Reference Guide)
	HUMAN HEALTH Support HH by preferring products that support and foster life throughout their life cycles and seek to eliminate the use of hazardous substances.	substances	HPD, Declare, C2C, BIFMA, LPC, GreenCircle CEF
		VOCs	CDPH, SCS Indoor Advantage, GreenGuard, BIFMA, SCAQMD
		Company human health impacts	Chemical Footprint Project, LPC, BIFMA, C2C
	CLIMATE HEALTH Support CH by preferring products that reduce carbon emissions and sequester more carbon than emitted.	embodied carbon	LCA, EPD, EC3, LPC, GreenCircle (GC) CEF
		company carbon	SBTi, CDP, GRI, GC Carbon Footprint Reduction, GreenCircle Certified Environmental Facts
	ECOSYSTEM HEALTH Support EH by preferring products that support and regenerate the natural air, water, and biological cycles of life through thoughtful supply chain management and restorative company practices	pollution	BIFMA, C2C
		Water footprint (product)	LPC, C2C, BIFMA, GreenCircle CEF, WaterSense
		Water footprint (company)	Global Water Footprint Assessment Standard, Alliance for Water Stewardship, CDP, GRI, B-Corp
		Biodiv & Conserv.	LPC, C2C, SCS Environmentally Preferable Product Certified, FSC, SFI, BIFMA
		Life cycle envir. impacts	LCA, EPD, TRACI (US EPA)
	SOCIAL HEALTH & EQUITY Support SH+E by preferring products from mfgs that secure human rights in operations and in supply chains, positively impacting workers + communities where they operate	Supply chain	ILO, FSC, C2C, LPC, Copper Mark, PEFC, Design for Freedom
		Comp. workplace	JUST, B-Corp, UN Glob. Comp.,, C2C, LPC, BIFMA
		Community	BIFMA, JUST, FSC Certified, Certified B-Corp, LPC
	CIRCULAR ECONOMY Support CE by reusing and improving buildings and by designing for resiliency, adaptability, disassembly, and reuse, aspiring to a zero-waste goal for global construction activities.	Sourcing	FSC, SFI, USDA Biobased, ANSI 373 Sustainable Stone, C2C, LPC, BIFMA, Ecologo
		End of life	C2C, LPC, GreenCircle Closed Loop Product Certification, UL claims, SCS claims
		Packaging	FSC, SFI, LPC, C2C, USDA Biobased
		Company circularity	C2C, TRUE certification
		Waste	TRUE Certified, LPC, BIFMA, SCS Zero Waste, NSF

# **Unpacking the Framework**How the CMF buckets are structured

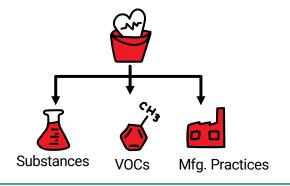




#### **BUCKETS**

The 5 facets of health identified in the AIA Materials Pledge are referred to as 'buckets' in the CMF because they're broad categories with a lot to organize and unpack in each.

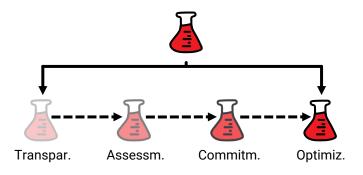
To understand how a product might contribute to Human Health, for example, we had to first identify what categories of impact (sub-buckets) would exist within that bucket.



#### **SUB-BUCKETS**

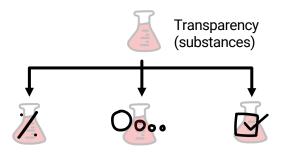
To distinguish the different types of human health impacts a product could have, we organized that bucket into three subbuckets: substances, volatile organic compounds, and manufacturing practices.

In total, across the 5 buckets, we identified 18 sub-buckets, which can be seen on the previous page.



#### T.A.C.O. SPECTRUM

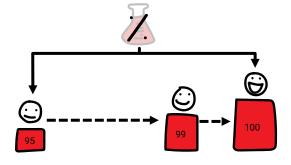
Within each sub-bucket, such as substances, there is really a 'spectrum' of action. Starting with identifying + disclosing impacts (**T**ransparency); then leveraging the data to identify improvement opportunities (**A**ssessment); turning those opportunities into meaningful plans or improvements (**C**ommitments); finally, demonstrating achievement of an existing benchmark (**O**ptimization). Lovingly dubbed, TACO.



#### **FACTORS**

Here's where it gets (Type II) fun. If we look at transparency of substances, we see that not all disclosures are the same. To understand the relevant *factors* that should be accounted for when evaluating the quality of transparency, we researched existing product certifications, labels and standards.

For example, within substances, transparency was typically evaluated by product certifications and standards using factors such as: (a) Granularity of disclosure (ppm) (b) Percent disclosure; and (c) Third Party Verification.



#### **BENCHMARKS**

*Finally*, within those factors there are benchmarks of achievement. Percent disclosure of substances were typically recognized at levels of 95%, 99% and 100% so these were therefore captured in the framework.

So, each benchmark, within every factor, along the TACO spectrum, in every sub-bucket, within a bucket, can be directly tied to documented sustainability achievement of a product.

## Who Built the CMF A by-industry, for-industry initiative



Thanks is owed to the many individuals, companies and partner orgs who spent countless hours mapping, re-mapping, organizing and reviewing Version 1 of the Common Materials Framework. Below are many of the contributors who made this resource a reality:

## mM Content Advisory Board







Perkins&Will















## mM Content Working Group













































































## **Ecosystem Reviewers**























