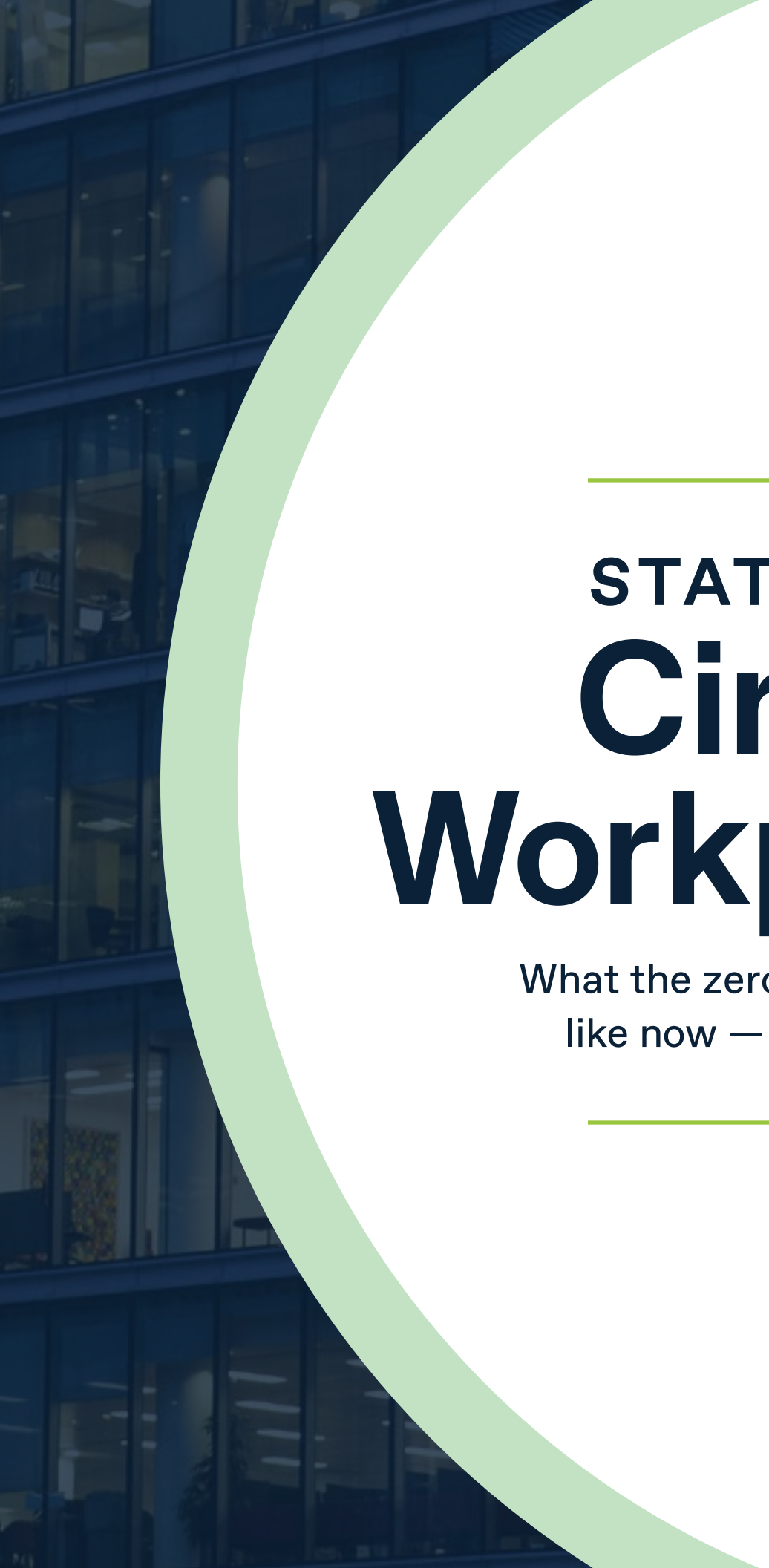


Green Standards

STATE OF THE Circular Workplace

What the zero-waste office looks like now — and why it matters.

circularworkplace.com

Contents

Executive Summary

The state of the circular workplace is emerging

A circular workplace is a zero-waste office – but it's also something much bigger. It's a growing global movement to bring the principles of the circular economy into the places and spaces where the economy happens.

This report is our best effort to capture exactly where the circular workplace is now. To do this, we have engaged a diverse coalition ranging from multinational corporations to innovative startups to industry associations to independent consultants. All agree that circularity has to be much bigger than recycling. All have made significant progress toward circular workplaces. And all agree there is much, much more to do.

This report is for anyone who has a say in the way their workplace operates. We want to share how a circular workplace happens; from the way a space is designed to how equipment is decommissioned at end-of-use.

The principles of the circular economy, as identified by the Ellen MacArthur Foundation, are to eliminate waste and pollution, circulate products and materials at their highest value, and regenerate nature. Our adaptation of these principles for the circular workplace, as elaborated in the pages that follow, are to:

1. Design out waste.
2. Circulate furniture, fixtures, and equipment at their highest value.
3. Regenerate the natural and built environment.

The pandemic proved that it was possible to transform the way we work. The climate crisis demands that we undertake that transformation sustainably. Forward-thinking organizations are already building toward circular workplaces. The State of the Circular Workplace in 2023 is promising. Together, we need to turn the ideas on the pages that follow into action, and when we publish next year's report, we need more examples of that action. Consider this your invitation to join us.

A full 96% of the companies on the Fortune 100 published a sustainability report last year.

And 58% of those reports – 56 in total – directly refer to their circular practices.

That's up 12% from the previous year, when 50 reports mentioned circularity.

What your workplace can do today.

The era of the Circular Workplace is here – but it may not be in your office yet. If you're reading these words, you probably want to change that. Here's how:

1. Stop hoarding. If items that went into storage at the start of the pandemic are still paying rent to collect dust, start there. Reuse is an active verb!

> "Putting products in storage for future management is not the solution, and most of the time these storage facilities purge directly to landfill." – *Heidi Frasure, Sustainability Manager of Circular Economy, Steelcase*

2. Plan ahead. Don't let the decommissioning of your office furniture, fixtures, and equipment be something the facilities manager must figure out when the lease ends.

> "We have to demonstrate that from fit out through to decommissioning, we are considering the impacts on our community." – *Kenna Houncaren, Senior Vice President, Real Estate & Procurement, Stantec*

3. Get buy in. Everyone knows we're in the middle of a climate crisis, but they don't necessarily know that a circular economy is a big part of the solution – or that your organization is part of it. An informed employee is an engaged employee.

> "Employees want their place of work to be set up for circularity success."
> – *Chris McFarlane, Global Responsibility Advisor, Waste, Starbucks*

4. Buy quality. It's no accident that all the furniture manufacturers represented in this report are deeply engaged with the circularity conversation.

> "The ideal future of the circular workplace would have material would be kept in use for the longest time possible with the least amount of processing. To help support this, Humanscale designs products for a very long life (for example, our seating has a 15-year 24/7 warranty)." – *Jane Abernethy, Chief Sustainability Officer, Humanscale*

5. Not necessarily new. If you're moving into a space, don't insist on "white boxing." Consider working with what's already there – and communicate the benefits.

> "When laptops, desktops, mobile phones and other technologies are reused, there are substantial financial savings (up to 70% below new prices) but also significant environmental savings (7-21 times the carbon emissions avoided over even recycling)."
> – *Gary Diamond, President, Quantum Lifecycle Partners LP*

"**Putting products in storage for future management is not the solution,** and most of the time these storage facilities purge directly to landfill."

— Heidi Frasure, Sustainability Manager of Circular Economy, Steelcase

Introduction

Who we are

Green Standards is a global sustainable decommissioning firm that captures value in workplace change. As an enterprise-level partner to the world's largest organizations, we efficiently and ethically redistribute furniture, fixtures, and equipment through charitable donation, resale, and recycling. To date, Green Standards has kept more than 110,000 tons out of landfill, maintaining a 98.6% landfill diversion rate across more than 1,000 projects. We have helped clients donate more than $40M worth of independently appraised furniture, fixtures, and equipment to non-profits and schools in their communities.

2,000+
Projects of all sizes

$40M+
In-kind donations

98.6%
Landfill diversion rate (by weight)

110,000+
Tons diverted from landfills

To date, Green Standards has completed projects in more than 36 countries.

Certified B Corporation — This company meets high standards of social and environmental impact.

Green Standards is a Certified B Corporation, which means we are committed to high standards of social and environmental performance, transparency, and accountability. This report is part of our commitment to building an inclusive, equitable, and regenerative economic system.

Why we created this report

Since 2009, Green Standards has worked with more than 25% of the companies on the Fortune 100 to keep valuable office assets in use and out of landfill. This is a vital step toward the circular workplace — but there's so much more to do. We created this report to unite the leading companies, associations, and individuals in this movement and explain what we have in common.

> "Seize upon this moment to hit pause and change your office trajectory," writes Lisa Whited, author of the book *Work Better Save The Planet* and a contributor to this report. "People's wellbeing and that of the Earth depends upon acting now."

We must capture as much value as possible in this workplace change. The office exists as a physical symbol of what your company is all about. It ought to maximize benefits for the people you employ and the planet on which you employ them.

To that end – not that circles have ends! – we've assembled the roundest possible roundtable of circular industry leaders and asked them all three simple questions:

1. What's the state of circular workplaces now?
2. Where do circular workplaces need to go?
3. And most importantly, what's standing in the way?

We have three key goals with this report:

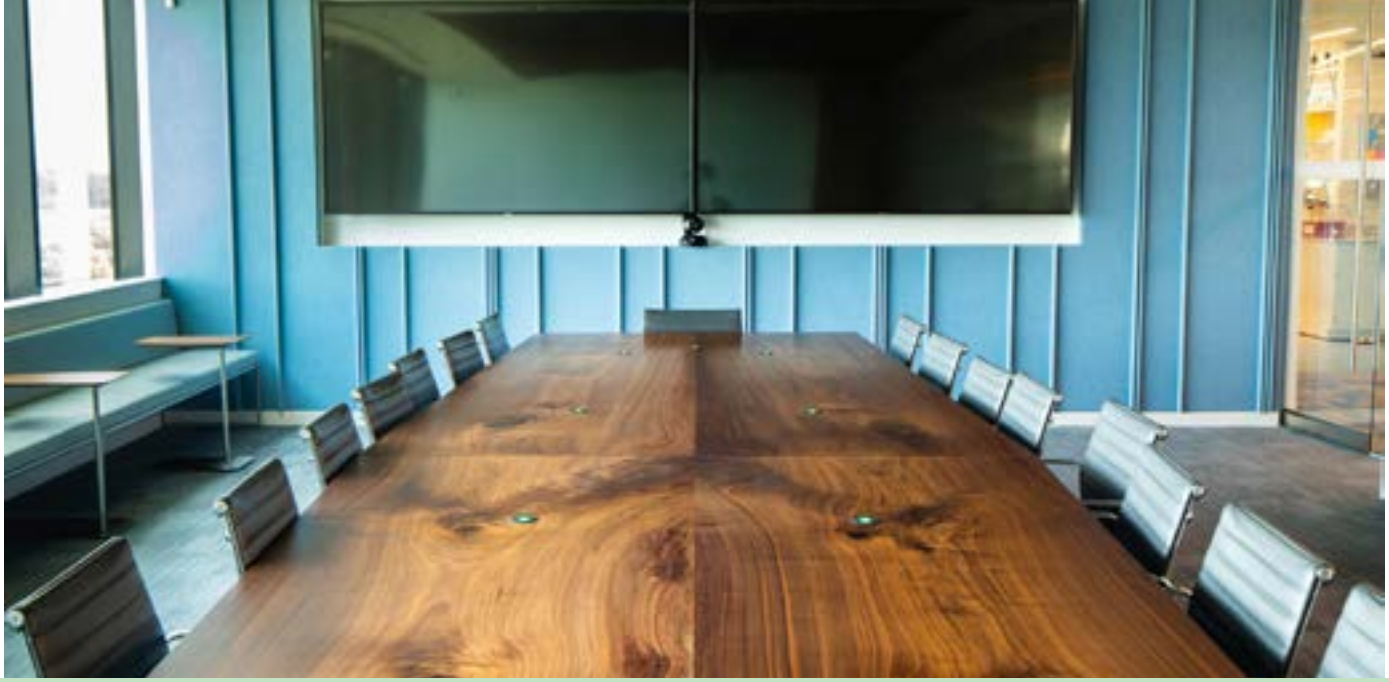
One, to prove that the circular workplace is here. Circularity has traditionally focused on single-use plastics and food waste, but at last the circumference has expanded to the built environments where we spend so much of our lives.

Two, to show how circular workplaces happen. If this report doesn't inspire you to take a step toward workplace circularity, it's missed the mark. Our goal in bringing these diverse perspectives and experiences is to show the clear steps engaged workplaces can take toward circularity. While some of these groups may offer similar services, no one company has the blueprint for a circular workplace.

Three: to connect key players to advance the conversation. If you want to know more about any of our participants, get in touch. And if you know an organization that should be involved, we want to hear about it: Let us know at info@greenstandardsltd.com.

People's wellbeing and that of the Earth depends upon acting now."

— Lisa Whited



This boardroom table was made from naturally fallen hardwood reclaimed by Cambium Carbon.

Who's around the table

Our understanding of the Circular Workplace consists of six broadly defined and overlapping groups, and we have solicited contributions from outstanding representatives of each.

Owners & Occupiers

The businesses and governments that operate workplaces are the customers of the circular workplace, and their demands for zero-waste are key to making change happen.

General Motors: Tina Burry, Manager, Circular Economy, Detroit.
Stantec: Kenna Houncaren, Senior Vice President, Procurement & Real Estate. Edmonton, Alberta.
Starbucks: Chris McFarlane, Global Responsibility Advisor, Waste. Seattle.

Furniture Manufacturers

These companies are among the world's premier suppliers of office furniture. They create the task chairs, workstations, and equipment that furnish the modern workplace.

Steelcase: Heidi Frasure, Sustainability Manager of Circular Economy. Grand Rapids, Mich.
Humanscale: Jane Abernethy, Chief Sustainability Officer. Toronto.
Teknion: Tracy Backus, Director, Sustainable Programs. Washington, DC.
Haworth: Dominic Daunter, Global Design, Innovation, and Sustainability Director. Holland, Mich.

Resale & Remanufacture

Before circularity was a word, these businesses were making old furniture, fixtures, and equipment new again. As circular workplace gains momentum, they are ready to meet the moment.

Davies Office: Doug Pilgrim, National Business Development Manager. Albany, N.Y.
Coggin Sustainable Office Solutions: Sam Coggin, Director. Preston, UK.
WholeCubes: Joel Stein, Owner. Chicago.

The Tahirih Justice Center in the Bay Area, a non-profit serving immigrant survivors fleeing gender-based violence, was the recent beneficiary of furniture donated by a major Green Standards client.

Technology, Services & Suppliers

This broad category encompasses major real-estate services companies, established non-profits, and innovative startups, all of whom contribute to circular workplace strategies.

CBRE: Lisa Fulford Roy, Senior Vice President, Client Strategy. Toronto.
Rheaply: Garry Cooper, CEO. Chicago.
Stok: Adam Guli, Director of Integrated Services, Denver.
Cambium Carbon: Theo Hooker, Co-founder and COO. Baltimore.
Quantum Lifecycle: Gary Diamond, President. Toronto.
Human-I-T: Allie Butkiewicz, Senior Vice President, Philanthropy. Long Beach, Calif.
Furniture Bank: Dan Kershaw, Executive Director. Toronto.

Design & Construction

A purpose-built circular workplace starts here: With the design firms that begin by considering what's already available and the construction companies that build without waste.

Cuningham: Gary Miciunas, Associate Principal and Director of Strategy. Denver.
Flat Iron Building Group: Julie Phillips, President + Partner. Toronto.
Gensler: Rives Taylor, Principal, Resilience Research Center and Global Design Resilience. Houston.
Benjamin Holsinger, Associate Product Development Global Resilience Leader. Washington, DC.
M Moser: Chantal Frenette, Director. Toronto.
JLL's Tétris: Silvia Aranda, Sustainability Client Solutions Director, Madrid.

Associations & Consultants

Industry groups and consultants bring stakeholders together and help underline the fact that no one office can achieve circularity on its own: We all have to work toward a common goal.

BIFMA: Steve Kooy, Director, Health and Sustainability. Grand Rapids, Mich.
USGBC TRUE Zero Waste: Stephanie Barger, Director, Market Transformation & Development. Sacramento, Calif.
Lisa Whited, workplace strategist and author of *Work Better. Save the Planet: The Earth-First Workplace is Good for People, Great for Business*. Portland, Maine.
Jon Strassner, workplace strategist, climate activist, and podcast host. Hartford, Conn.

Background & Definitions

What's a Circular Workplace?

The concept of circularity is beautifully simple in theory: There is no such thing as waste, just resources out of place. Circularity means infinite reuse of finite assets. Once we design a system that makes full use of materials that are already in use, there will be no need to harvest virgin resources for inputs or contribute to landfills with outputs. We would reduce the need for material extraction and could help limit global temperature rise to within 2 degrees[1].

But the concept of circularity is mind-bogglingly complex in practice. Our entire global economy is linear by design, a "take-make-waste" model that means almost everything we buy is just passing through our hands on a one-way trip to the dump. We know that blue-box recycling isn't enough – recent figures from the World Economic Forum estimate that in the U.S., 68% of paper, 30% of glass, 15% of electronic waste and a mere 6% of plastic is recycled. And while we need to improve and expand these programs, it must be stressed that recycling alone is not circularity.

To that end, today's discussions of circularity generally focus on subjects like food waste and single-use plastics. This is vital, but our purpose here is to expand the discussion to encompass what's in your office: furniture, fixtures, equipment, and the building itself. If we're talking about a circular economy, it makes sense to consider the places and spaces where the economy happens. And that gets complex very quickly.

It must be stressed that recycling alone is not circularity.

"Our current examples of circularity are too simple for the workplace," says Steve Kooy of BIFMA, the not-for-profit trade association for business and institutional furniture manufacturers. "Beverage container recycling, automotive recycling, and general metal recycling require very little planning or input from the product user."

In other words, workplace circularity requires buy in from everyone in the world of workplaces. It can't happen in the background while the rest of us go about business as usual. It has to be a public and deliberate choice: One that saves money and resources, supports local communities, engages employees, and represents meaningful climate action.

Why Should We Aspire to Workplace Circularity?

In the world of circularity, one number keeps coming up: 7.2%.

That's how circular the world economy is, as measured by the 2023 Circularity Gap Report published by Circle Economy, a Dutch NGO with research supported by Deloitte. The more raw material extraction the economy requires, the lower that number goes. Unfortunately, it's been dropping, from 9.1% in 2018 to 8.6% in 2020.

1. The Circularity Gap Report 2023 (pp. 1-64). Amsterdam: Circle Economy.

In the world of corporate real estate, the key figure is 40%.

That's the much-shared percentage of global carbon emissions contributed by the built environment. This includes building, occupying, and demolishing the places where we live, work, and play – all of which occupy about 1% of the planet's surface area.

The concept of workplace circularity is an opportunity to simultaneously improve both of those numbers. They say charity begins at home, but we'd argue that circularity can begin at work. Our analysis shows that 96% of the companies on the Fortune 100 publish an annual sustainability report, and 58% explicitly mention circularity. The most successful corporations on the planet employ experts on circularity and are ready to lead the way. Our goal here is to give them credit, highlight best practices, and above all bring some attention to this very possible and absolutely necessary work.

In the words of Theo Hooker, the co-founder of Cambium Carbon, a clever startup that helps large wood buyers source locally salvaged material: "From the buildings we work in, to the furniture & furnishings we work on, the materials used have the potential to empower a truly circular, regenerative system. And big workplaces have the power to prioritize the choices that might not be flashy but that are most important in generating positive impact."

> **"Our current examples of circularity are too simple for the workplace."**
>
> ***— Steve Kooy, BIFMA***

What's Possible Now?

The circular ideal is that everything is a resource for something else. In their seminal 2002 book *Cradle to Cradle: Remaking the Way We Make Things*, architect William McDonough and chemist Michael Braungart develop this metaphor using nature as the model: Just as the biological nutrients in an ecosystem are continually reused, so should the "technical nutrients" in our economies.

This is closed-loop circularity: Once the system is operating, it neither requires resource inputs nor generates waste. And while it's certainly the goal for the workplace, we're not there yet.

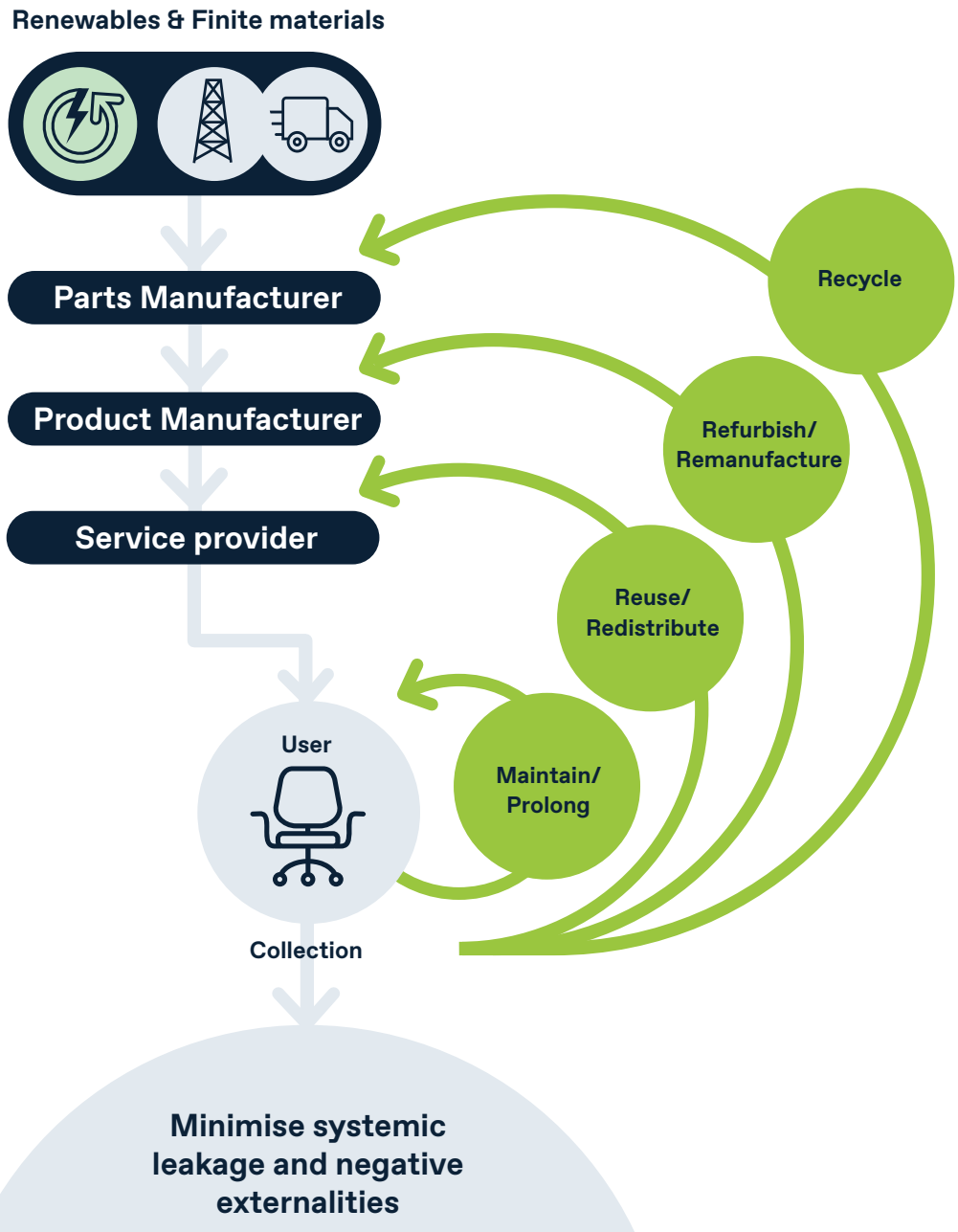
The first step for most offices is what we might call open-loop linearity: Somewhere in between the straight line to the landfill and the ideal of the closed loop. That means minimizing use of raw materials, maximizing lifecycles of all products, and recycling to the best of our abilities. It also means working toward closing the loop.

We can't accept the status quo, in which valuable resources are lost to landfill. But we also can't let perfection be the enemy of the possible. With every additional loop we add to the resource cycle – every time part of your workplace is shared, maintained, reused, refurbished, or (as a last resort) recycled – we postpone a trip to the dump. And with general education, continuous improvement, and widespread adoption, we eventually eliminate that trip altogether.

What's Coming?

To varying degrees in different jurisdictions, the circular workplace is here. This may be the first time you're hearing about it, but it won't be the last. Manufacturers are adding Environmental Product Declarations (EPDs) to their products. Businesses and governments are instituting quotas for recycled and refurbished furniture, fixtures, and equipment. Green Standards and the many contributors to this report are rapidly growing their businesses, building out the economic case for the circular economy.

And most important, the employees of these workplaces – the people who sit behind those desks – are realizing that if they're going to come into an office, it ought to be a sustainable one.



Adapted from © Ellen MacArthur Foundation Circular Economy Systems Diagram (2019) / www.ellenmacarthurfoundation.org / Drawing based on Braungart & McDonough, Cradle to Cradle (C2C) / This is an unofficial translation and has not been endorsed or approved by the Ellen MacArthur Foundation.

Perspectives: 1 / 3

How does your firm, industry, or association address circularity today?

Owners & Occupiers are focused on responsible procurement, internal reuse, and employee engagement.

Manufacturers are building products that last, extending product lives through resale and donation, and rethinking the design process.

Resellers & Remanufacturers are embracing a societal shift toward their offerings.

Construction & Design firms are increasingly aware of their responsibility to help clients put circular theories into practice.

Technology, Services & Suppliers offer a constellation of solutions, from furniture inventory exchange and management to IT refurbishing.

Associations & Consultants offer a wider perspective, from which they can offer more pointed critiques of what needs to be done.

Owners & Occupiers

Kenna Houncaren of Stantec

> We track what we consume and scrutinize those who supply to us – if we are sourcing new, we want to see an element of reuse within the product.

Chris McFarlane of Starbucks

> When Starbucks renovated our headquarters during the pandemic, we were intentional about weaving sustainability throughout. We reimagined our employee experience through the lens of sustainability and brought it to life in many ways. We have transitioned all of the cups and food take away packaging in our building to be reusable. This includes our cafeteria, our self-serve kitchenettes, and our internal Starbucks store. We are communicating our enterprise sustainability strategy through eye-catching artwork around the building.

Tina Burry of General Motors

> For GM, addressing workplace circularity means designing our products and operations to allow for materials to recirculate and be reused as much as practicable. In the workplace, GM leverages several internal and external partnerships and platforms to identify opportunities to circulate equipment and furniture. Through these partnerships, GM's Asset Recovery Team and Sustainable Workplaces organizations have been able to reallocate equipment and furnishings both internally and through external donations.

For GM, addressing workplace circularity means designing our products and operations to allow for materials to recirculate and be reused as much as practicable.

— Tina Burry of General Motors

Manufacturers

Heidi Frasure of Steelcase

> It starts with our design process: We design all products to last a very long time, sometimes longer than the intended first life, and offer a very competitive extended warranty. This is the foundation of a circular economy, building quality products that last, but this can also pose issues for circular business models. Through several global circular pilots related to remanufacturing and refurbishment, we have learned that durable products can sometimes be difficult to pull apart and reassemble for remanufacturing or reuse, so we are actively implementing these learnings to better inform our design process to improve the circularity of our products. We are exploring several circular business models to be able to capture the value of our products at the end of use, harvest parts, and redeploy products for a second life. We educate customers in our sales process that better is possible.

Jane Abernethy of Humanscale

> For many years now, our products have been designed for repair and upgrade using long lasting materials and components. We've been "insourcing" manufacturing processes, and testing griding down/melting down the material to use it in manufacturing new products. There is still research and development work needed to implement this program, but we're in the process of figuring it out.

Dominic Daunter of Haworth

> A circular economy is one of the biggest opportunities to design a sustainable future and is an essential part of our strategy. We are focused on two key areas: Design for Sustainability and Circular Services.

Tracy Backus of Teknion

> Teknion uses the framework of Design for the Environment with impact to the procurement, design and manufacturing process which considers materials, component concepts(modularity), weights, product process, energy resources, electricity mix and packaging to reduce impacts at the beginning of product design + development. Products that can be repaired easily, reupholstered or repainted for aesthetic purposes and reconfigured are part of the increased practices for DfE.

Resale & Remanufacture

Joel Stein of Whole Cubes

> We are actually an off-shoot of our family's business, S. Stein, that began in 1930 reselling and refurbishing used office furniture. Back then, the idea of throwing out something still very serviceable would have been unconscionable.

Doug Pilgrim of Davies Office

> Overall, the Davies remanufacturing process is a sustainable and cost-effective way to address workplace circularity. It diverts waste from landfills, reduces the need for new materials, saves energy, and reduces emissions. It also saves businesses money on the cost of furniture.

Sam Coggin of Coggin Sustainable Office Services

> We provide a range of high-quality, refurbished office furniture, reducing the demand for newly manufactured items. In the past year alone, we have saved an estimated 24,502 items from going to landfill, amounting to approximately 342 tonnes of waste prevention. Additionally, our office furniture refurbishment service breathes new life into existing items, extending their lifecycle and contributing to a substantial decrease in our clients' carbon footprints. It also saves businesses money on the cost of furniture.

Technology, Services & Suppliers

Allie Butkewicz of Human-I-T

> We firmly believe that the key to a sustainable future lies in the principles of reuse, repurpose, and recycle. Our unique approach to Information Technology Asset Disposition (ITAD) is deeply rooted in these principles, which form the bedrock of the circular economy. This has not only significantly reduced the volume of e-waste but also promoted digital equity by providing more than 300,000 pieces of technology to underserved communities. Our work has resulted in more than 13.6 million pounds of e-waste being diverted from landfills.

Lisa Fulford-Roy of CBRE

> From a global perspective, we see adoption being more prevalent in the US largely due to the TRUE Workplace Certification through the affiliation with USGBC under GBCI. We are however starting to see more and more examples in Europe. Clients we are working with both certify or follow the principles of Circular Economy which are focused on product reduction, re-use and recycling with a goal of 90% diversion from landfill and energy recovery. Much of the strategy and success is in upstream decisions and policy to create a closed loop operating system impacted by procurement policy/targets, purchasing product with recycled content, take-back programs such as Kimberly Clark's paper recycling and re-use, food waste recovery programs, segregation at point of waste, catering vendor agreements and features as simple as reusable kitchenware.

Much of the strategy and success is in upstream decisions and policy to create a closed loop operating system.

— Lisa Fulford-Roy of CBRE

Dan Kershaw of Furniture Bank

> Furniture Bank significantly contributes to the circular economy by repurposing gently used furniture and household items that would otherwise be discarded. Leveraging a national Canadian network of charity partners, we save these items from becoming landfill waste and give them a renewed purpose in another home, ending furniture poverty. In doing so, we transform empty houses into fully furnished homes, and provide individuals and families in need with the home furnishings required to be successful and avoid returning to crisis.

Garry Cooper of Rheaply

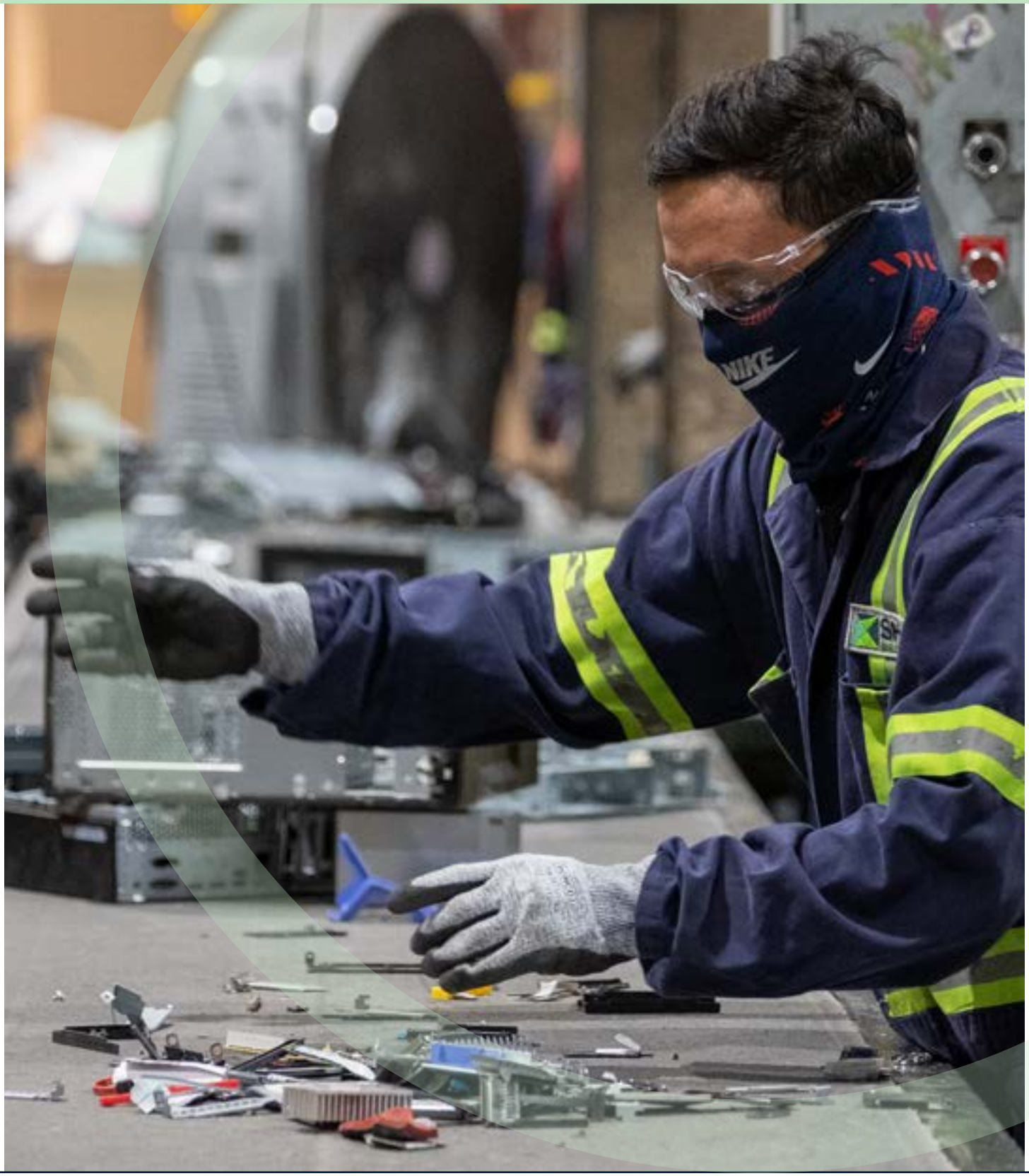
> As remote and hybrid work environments become the new norm, many businesses are drastically reducing their real estate portfolios. In these now-empty spaces sits thousands of pounds worth of valuable office furniture, fixtures, and equipment. Rheaply addresses workplace circularity by providing a digital platform to help businesses find or create the next best use for this furniture and equipment, as well as hard-to-recycle building materials that otherwise would be sent to landfill. Through the Rheaply platform, organizations are able to circulate their items internally across their organization, externally to a select group of partners, or to the entire Rheaply ecosystem of partners comprised of nonprofits, small businesses, service providers, and other enterprise organizations. As a result, our team has helped hospitals clear out buildings, investment firms to donate thousands of office chairs, and utility companies to recover value out of expensive equipment. It is Rheaply's belief that every business can be circular. This starts with knowing what you have and putting it in a place of value.

Adam Guli of Stok

> At Stok, we are passionate about enabling organizations to consider the full life cycle of the workplace, from concept to future handover to help our clients define their sustainability purpose.
>
> When looking at the current and future workplace needs, Stok has always focused on a purpose-driven approach that highlights the need for sustainable design throughout the way a work environment is developed, while enabling and empowering occupants to think about the environment around them.
>
> Calculating the carbon impact of all products, whether construction materials, lighting fixtures, flooring, or furniture, from pre-installation to post-dismantling, is critical to successfully achieving sustainability commitments.

At Quantum Lifecycle Partners' Toronto recycling facility, electronic waste is safely, securely and transparently broken down into reusable components and recycled commodities.

Source: Quantum Lifecycle Partners



Gary Diamond of Quantum Lifecycle

> Circularity is built into Quantum Lifecycle's business model as we help companies to resell and recycle their redundant technology sustainably and responsibly. Our goal is to keep equipment in use as much as possible, either as a whole unit or if not recovering parts for reuse, since our analysis shows this makes the most financial and environmental sense. To help educate our advocates, we launched a podcast in January 2023 called The Circular Future, which gives access to thought leaders and innovations to help business professionals be sustainability champions in their companies, even if this isn't part of their core job.

Theo Hooker of Cambium Carbon

> Cambium is a supply chain technology company that makes it easy for large wood buyers to source locally salvaged material. Our expertise lies in providing easy access to the most sustainable wood option, Carbon Smart Wood, offering unmatched durability and scalability for building solutions - both indoors and outdoors.

Design & Construction

Chantal Frenette of M Moser

> Our design firm addresses circular design for workplaces through a multi-faceted approach encompassing education, material selection, strategic partnerships, and continuous experimentation. Our material selection process stands as a rigorous cornerstone of our operations. We carefully evaluate materials before they enter our library and during the project specification phase. Our criteria encompass a meticulous assessment of materials and furnishings boasting Environmental Product Declarations (EPDs), affording us comprehensive insights into their composition and carbon footprint. Similarly, we give due credence to certifications such as Cradle to Cradle.

At Furniture Bank's warehouse in Toronto, donated corporate furniture that's "home approved" awaits distribution to beneficiaries.

Julie Phillips of Flat Iron

> In the built environment, extending building life by retrofit, repair, maintenance and adaptive reuse is a key concept of circularity. Flat Iron is the first company in Ontario to complete a Living Building Challenge retrofit and has completed two LEED-certified interior office renovation projects. We support clients in "design for circularity" choices including the selection of low-carbon or durable materials instead of cheaper, disposable options; modular construction to minimize waste in the construction process; designing for flexibility so that the building can accommodate multiple uses and designing for disassembly to promote re-use at end of building life.

Gary Miciunas of Cuningham

> Cuningham is a proud sponsor of the IFMA Workplace Evolutionaries (WE) community. Together with the Environmental Stewardship Utilities and Sustainability (ESUS) community, we have promoted the idea of "Circular Workplace" in presentations to IFMA Facility Fusion and IFMA World Workplace audiences and in IFMA WE:binars. Earlier this year in San Francisco, we presented Radical Innovations: Delivering a Circular Workplace. Since then, we have tested many of these ideas in a project that will be co-presented with Lisa Whited during IFMA World Workplace 2023 in Denver. It considers many of the strategies that we included in Cuningham's Interactive Tool for Circular Economy Strategies in the Built Environment. In addition, we have participated in IFMA's Emerging Topics Working Group including Circular Economy as one of six trends.

Rives Taylor of Gensler

> For years, the Gensler Research Institute has been pulling insights on workplace circularity for our designers to use as they guide our clients in closing the loop on furniture, fixtures, and equipment (FFE) and building materials at the end of their first useful life. Additionally, our designers are exploring opportunities to plan in advance, designing projects with the end in mind and incorporating reused FFE from the start Our various research efforts within the Gensler Research Institute over the years have sponsored and launched a variety of circular economy strategies that are now in play - for example our original "gSalvage" research has evolved into "gFresh" as we adapt to the market and pre-conceptions around reused materials. Additionally, our "What's Old is New Again" research is being practiced with our clients at a global scale.

Silvia Aranda of JLL Tetris

> At Tétris, we've looked at how we can make operational changes in order to reduce the use of new resources and limit waste and loss. The Tétris Sustainability Code is our internal tool that advises how sustainability and circular considerations can be embedded at each stage of the design and build process to maximize value for our clients.
>
> We prioritize the use of materials that have been audited in order to minimize any impact on human and environmental health, and those that are certified by programs including EPD and Cradle to Cradle©, that influence decision-making towards low carbon design. We select fit-out materials, finishes and furniture solutions based on the 3 R's – Reduce, Reuse and Recycle. We prevent excessive and unnecessary waste and limit the consumption of non-renewable resources that could negatively impact the overall carbon footprint of the project. And we design and build to reduce material loss, opting for lighter products that can also contribute to a lower carbon project byminimizing logistic impact and waste.

In the process of building Gensler's 120,000-square foot office at 1700 Broadway in New York City, 91% of waste was recycled and donated.

Photo: Gareth Gardner/ Gensler
Source: What's Old Is New Again: Circumnavigating the Circular Economy, gensler.com

Associations & Consultants

Steve Kooy of BIFMA

> Circularity, being a multifaceted concept, demands a clear understanding and shared vision among stakeholders. BIFMA, alongside other organizations, plays a pivotal role in shaping industry-wide consensus. It seeks to establish clear expectations and definitions, much like other sustainability initiatives such as green building, carbon neutrality, and social responsibility. These terms, while commendable in their intent, can often be vague and subject to varied interpretations. As a result, confusion, greenwashing, and frustration may arise, hindering progress.

Circularity, being a multifaceted concept, demands a clear understanding and shared vision among stakeholders.

— Steve Kooy of BIFMA

Stephanie Barger of US GBC (TRUE)

> U.S. Green Building Council has been a leader in transforming markets, especially in the built environment. LEED is our premier certification administered by our certifying organization, GBCI. In 2016, the USGBC acquired TRUE, which provides zero waste certification guidance and transforms the linear wasteful systems into a closed loop economy.
>
> TRUE – Total Resource Use and Efficiency — focuses first on zero waste purchasing which drives products that are reusable, repairable, recyclable, and compostable. These materials are also made from recycled materials. By changing our focus upstream, TRUE Certification is a comprehensive review of your workplace policies and practices with an emphasis on engagement and continuous improvement from leadership and all employees. TRUE takes a deep dive into all resources (materials, financial, and human) to transform your waste management system to a holistic approach which supports a zero-waste economy for all.

Lisa Whited, author of Work Better. Save the Planet

> It is common for clients to have not considered the circular economy and how it can impact a workplace. However, once clients hear about the amount of waste in the design, construction, and creation of workplaces, as well as the negative impact of landfills (which create methane, a gas that is many times more damaging than carbon emissions), they usually want to learn more about what they can do differently.
>
> Focusing on circularity in a project is more successful when it can be tied to an organizational vision or values. For example, an environmental services company has a vision of, “Clean water, safe environment, healthy communities, happy people.” Striving to create a circular workplace was a natural fit because that is what their ethos is all about.

Jon Strassner

> Our industry has traditionally tap danced around this issue. Some manufacturers have begun to talk about disassembly ease and local activation to divert from landfill, but we haven’t, as an industry tackled this. In my podcasting work we have had a few conversations that I hope will provide some direction. I recently talked with Eric Gannon, of Gensler, and we discussed the need for designers to stop insisting on a clean white box before they begin designing. Don’t clean out the space. Don’t send everything to the landfill. Sit down with the client and re-frame the concept of beauty. It’s not starting with new everything. We brought forth a new term in one of my early episodes: the aesthetics of ethics. We need to find beauty in re-purpose and re-use. We are not there yet, but I’d like to think we can get there.

Associations & Consultants demand that we widen the scope of circularity and eliminate the idea of waste management.

Owners & Occupiers are working to meet elevated employee expectations with flexible, sustainable spaces.

Perspectives: 2 / 3

What does the future of the circular workplace need to look like and how is your firm planning to support?

Manufacturers are pushing for broad-based circular support and understanding down the value chain.

Construction & Design firms are shifting toward building less, building smart, and building efficiently.

Resellers & Remanufacturers see a renaissance in domestic manufacturing as a potential boon to their work.

Technology, Services & Suppliers argue that by getting ahead of potential regulation on circularity, clients will futureproof their operations.

Owners & Occupiers

Kenna Houncaren of Stantec

> With employees seeking autonomy in where and how they work, we need to shift our investment away from square footage towards more impactful experiences. For Stantec, this means the office must be vibrant, welcoming and have a variety of styles to suit the needs of our people. We also need to walk the talk on sustainability – we have to demonstrate that from fit out through to decommissioning we are considering the impacts on our community. In the future, with increased pressures to complete projects quickly and realize savings, we need increased support from those that are able to connect the need with the supply.

Chris McFarlane of Starbucks:

> Employees want their place of work to be set up for circularity success. Office spaces should be designed to include space for recycling and composting.
>
> It should also provide reusable solutions for food and beverages purchased and consumed on site. This means thinking about washing logistics and reusables.

Employees want their place of work to be set up for circularity success.

— Kenna Houncaren of Stantec

Tina Burry of General Motors

> We have improved our workplace design through years of transformation and user feedback and have developed a set of design standards that includes specific furniture standards offering a kit-of-parts approach where future reusability within the GM portfolio is the priority. If the application is not appropriate for use within GM, we then extend beyond our portfolio to local non-profit organizations.
>
> Additionally, as we look ahead, through our existing partnerships with architecture-engineering firms, we ensure there is careful consideration of sustainability and accessibility with respect to workplace design, to ensure our workplaces support our sustainability goals, while demonstrating inclusivity for all employees.

Manufacturers

Dominic Daunter of Haworth

> A circular workplace needs to be flexible and adaptable, regenerating natural systems free of toxic materials. Product should be viewed as feedstock for future products. Haworth's holistic view on product design, manufacturing, delivery, and product end of use help support the transition to a circular economy.

Heidi Frasure of Steelcase

> The future of a circular workplace looks like everyone playing a role in a circular economy:
>
> - Manufacturers need to start the circular process by designing for longevity, reuse, repair, remanufacturing, and harvestability.
> - Circular partners must exist to support logistics, take back, recycling, localized repair and refurbishment, finding donation partners, etc.
> - NGOs need to support breaking down barriers in public policy, recycling infrastructure, and finding solutions to problems that exist for entire industries like reverse logistics or sustainable packaging solutions.
> - Governments need to create policy that actually promotes recycling or reuse, funding more infrastructure, subsidizing circular practices like remanufacturing, and supporting true circularity.
> - Customers need to be willing to invest in circular strategies and products.

Jane Abernethy of Humanscale

> One of the main challenges currently inhibiting circularity is that it is only sometimes a consideration when a new space is being built out, and it is rarely a consideration at the end, when a space is being decommissioned. During the RFP process, we often get asked whether we have a take-back program. Unfortunately, when it comes to disposal of the material, we almost never get requests for returning the product. In the ideal future, projects would have enough resources and time allotted to the decommissioning that all materials would be sent to optimal use.

Tracy Backus of Teknion

> As leases decline and the return to the office lacks buy in, there will be more and more assets that will be considered obsolete and enter the waste stream. Finding ways to manage inventory, reuse and recreate workplace solutions and use the resources already consumed will be critical to reduce carbon emissions. At a minimum, until we have a circular workplace as a first step for a designer and a last step for owners, conversations about budget, timelines and expertise have to be a part of the business practices for the built environment.

Resale & Remanufacture

Joel Stein of Whole Cubes

> Refurbishing office furniture had its renaissance back in the 1990s. And, in those years, even the bigger office furniture manufacturers had their own sanctioned refurbishing divisions. But, this was all abandoned by the early 2000s as sourcing of materials, and, ultimately products, themselves, from the far east developed on a large scale.
>
> Costs for new furniture went down to the point of disrupting the refurbishing market as it became no less expensive using domestic labor and materials to refurbish a used cubicle or a chair than it was to purchase similar, new mid-market items produced overseas.
>
> However, recent supply chain disruptions, desires to bring back production to the U.S. for job growth and domestic security, and sustainability initiatives have all begun to make refurbishing look more viable.

Sam Coggin of Coggin Sustainable Office Services

> As we look towards the future, we believe the circular workplace needs to encompass not just the tangible, physical elements of the office, but also the underlying processes and values. At Coggin SOS, we are already strategizing to integrate sustainability deeper into our business model, by focusing on aspects such as our supply chain management and transportation efficiency.

Doug Pilgrim of Davies Office

> The future of circular office furniture in the workplace needs to be more sustainable, more efficient, and more accessible. The materials used to make office furniture should be recycled materials or grown and harvested sustainably. The manufacturing processes should be more efficient, using less energy and fewer resources. And furniture manufacturers need to promote Remanufacturing, donation and make it more accessible to their customers, making it easier and more affordable to remanufacture office furniture.
>
> Davies Office is continuing to develop and expand its remanufacturing process, making it more efficient and keeping more product out of the waste stream. The company is partnering with other organizations to promote our Sustainable Product Exchange and Sustainable Banking programs, our foundation of a circular economic business model.

The future of circular office furniture in the workplace needs to be more sustainable, more efficient, and more accessible.

— Doug Pilgrim of Davies Office

Davies Office's 300,000 square foot facility in Albany, NY, includes a full production line, warehouse, showroom, outlet, office and nearly 100 trailers holding product ready to be revamped to the Davies standard.

Source: DaviesOffice.com

Technology, Services & Suppliers

Adam Guli of Stok

> The future of the circular workplace is scalable. Stok helps our clients look at not just single projects but take an entire portfolio approach to sustainability.
>
> The construction industry has typically focused on budget, speed to market, and developing aesthetically pleasing spaces. Stok is committed to driving sustainable design as front and center in these future workplaces and challenging old norms of the construction process to push sustainable innovations throughout the entire development of a project. This can be achieved by selecting healthier materials, ensuring that suppliers operate in alignment with sustainability goals, and supporting organizations to look further in the supply chain to ensure they know where and how the products and materials are sourced to support their projects.

The future of the circular workplace is scalable.

— Adam Guli of Stok

Lisa Fulford-Roy of CBRE

> Clients who value employee engagement & the culture of sustainability are most inclined to introduce a circular economy. Based on our client base and industry knowledge, the financial sector is the most prominent sector adopting and certifying circular economy principles at this time.

Allie Butkewicz of Human-I-T

> The future of the circular workplace needs to be a harmonious blend of technology, sustainability, and human-centric design. It should be a place where waste is minimized, resources are maximized, and the digital divide is bridged. Human-I-T is committed to supporting this vision by continuing to provide technology and digital literacy to underserved communities, thereby promoting digital equity and reducing e-waste.

Dan Kershaw of Furniture Bank

> Furniture Bank can assist in making decommissioning furnishings a circular activity by serving as a sustainable outlet for unwanted household items. Furniture Bank creates opportunities for households and businesses to contribute positively to their communities and the environment by donating their used home furnishings like chairs, sofas, small tables, desks and other home goods.

Garry Cooper of Rheaply

> A circular workplace is how businesses can future-proof their operations against changing macroeconomic conditions. Starting with our easy-to-use digital inventory management, workplaces will know how many items of a specific product are in-use or available while tracking the exact location and condition of those items in real time. When organizations have visibility into what they already own, they can make more informed decisions, making remodels, clear-outs and disposition streamlined and less expensive. From there, we activate a broad network of community-based reuse among organizations. When it's time to refresh a workspace, businesses can recover value by selling or donating the old while procuring new or slightly-used from other areas of the company or from external partners. Circular workplaces must have an emphasis on measuring the impact of circularity. Cost savings, carbon metrics, category analysis and more are accessible digitally from any internet-connected device through Rheaply.

Gary Diamond of Quantum Lifecycle

> To close the loop of circularity, we believe we need two key elements. Firstly, we need education on why a circular workplace is important and what it can look like. This awareness helps to motivate employees to take new action and build a business case so there is company buy-in. Secondly, we need systems and processes that make it easy for everyone to do the right thing. For our business, this means one place for companies to access reuse and recycling services for anything with a battery or a plug.

We need systems and processes that make it easy for everyone to do the right thing.

— Gary Diamond of Quantum Lifecycle

Theo Hooker of Cambium Carbon

> What if our supply chains were truly regenerative? What if the products we produced and consumed contributed to a better world? Cambium's Carbon Smart Wood™ is the manifestation of those questions. Workplaces built with materials that would've headed to landfill. Desks from trees that fell down the street--telling the stories of people and places. If we are successful, salvaged and repurposed materials will be the norm. Extractive practices (even if sustainable), will be a second thought. Natural areas will be allowed to thrive, we will waste less, we will have built resilient local economies around the resources we have in our backyards, and we will double down on community level impact that benefits people and the planet.

Design & Construction

Gary Miciunas of Cuningham

> Office buildings have had an outsized negative impact on the planet. Applying principles from the circular economy to their design and construction could completely transform them—formally, functionally, and socially. At Cuningham, we're developing clear and ambitious strategies to reimagine every stage and component of a building, making it nature positive and creating value and benefits at every opportunity for people, business, and the environment. Our goal is not just to reduce carbon emissions but to restore carbon cycles; not just to conserve water but to restore water cycles; not just to minimize materials but to preserve natural capital.

Julie Philips of Flat Iron

> In the built environment, the future of the circular workplace needs to reflect the following philosophy:
>
> • Build Less: Retrofit existing buildings rather than seeing them demolished and replaced.
>
> • Build Smart: Ensure buildings can be repeatedly repaired, repurposed, and recycled at end-of-life.
>
> • Build Efficiently. Emphasize retrofits over demolition, design-for-disassembly principles and looking for opportunities to re-use materials that are by-products of the demolition process.

Silvia Aranda of JLL's Tetris

> In the very near future, it's likely we'll be required to almost systematically carry out resource diagnosis for the fit-out of new offices. There are numerous developments in this area with the emergence of specialized players in the market, new regulations, and a philosophy of reuse diagnosis and circular economy which is beginning to change our mindset. A collaborative approach and successful execution of circular ecosystems by sector or products category will be decisive in order to offer the workplace its full circular potential.

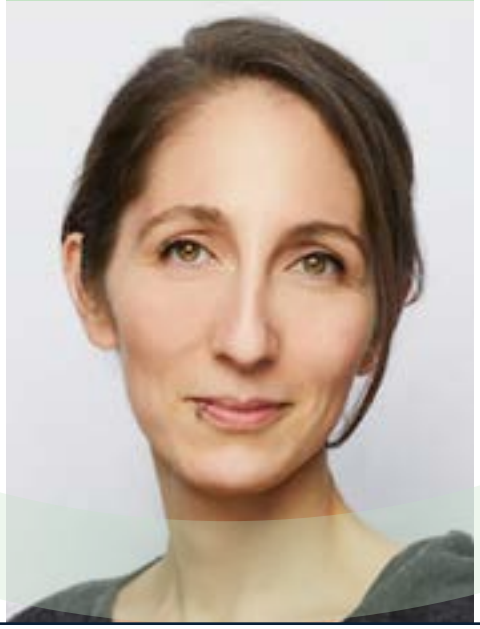
A circular workplace is how businesses can future-proof their operations against changing macroeconomic conditions.
— ***Garry Cooper of Rheaply***

When tenants vacate, white boxing the space can no longer be the norm.
— ***Benjamin Holsinger of Gensler***

The future of the circular workplace hinges on a paradigm shift towards sustainable materials, adaptable designs, and a commitment to longevity.
— ***Chantal Frenette of M Moser***

Focusing on circularity in a project is more successful when it can be tied to an organizational vision or values. — ***Lisa Whited***

One of the main challenges currently inhibiting circularity is that it is only sometimes a consideration when a new space is being built out, and it is rarely a consideration at the end, when a space is being decommissioned.
— ***Jane Abernethy of Humanscale***



Businesses need support to understand that a circular approach is not only environmentally responsible but also economically viable." — ***Sam Coggin of Coggin Sustainable Office Solutions***

Benjamin Holsinger of Gensler

Workplace circularity will require full engagement from all parties in the building or interior fit-out's lifecycle.

- Manufacturers need to make products that are designed for circularity.
- Clients need to require their spaces to be designed using reused materials and invest in those materials. They will also need to have an understanding of circularity, what FFEs end-of-life options are, and how circularity impacts their own ESG goals and carbon reduction strategy.
- Furniture vendors and dealers need to provide circular solutions and not just the typical "buy new" options.
- Building owners and management companies need to develop standard operating procedures around circularity. When tenants vacate, white boxing the space can no longer be the norm. Future tenants should tour the space and be given the opportunity to keep materials and FFE that fit their needs, and if not, existing tenants should have the opportunity to assess – a landfill should not be an option.
- General and demolition contractors need to propose alternate solutions or make waste diversion a standard practice when approached by clients, owners, or building managers who are interested in white-boxing a space.
- Designers need to make the incorporation of reused furniture a standard practice. It is important to consider that the higher the quality of the product, the higher the chances are that our clients will reuse that furniture long-term. In Gensler's 50+ years in business, many of our offices have classic, quality furniture that has followed us from office to office as we grow.

Chantal Frenette of M Moser

The future of the circular workplace hinges on a paradigm shift towards sustainable materials, adaptable designs, and a commitment to longevity. By embracing reused and refurbished materials, emphasizing quality and timelessness, and designing for adaptability, we can create workplaces that minimize waste and resonate with the ever-evolving needs of organizations and the environment.

Associations & Consultants

Steve Kooy of BIFMA

Our current examples of circularity are too simple for the workplace. Beverage container recycling, automotive recycling, and general metal recycling require very little planning or input from the product user. Additionally, recyclers are set up to breakdown materials back to raw materials. Current recycling relies on large volumes of relatively consistent materials continuously feeding the recycling business.

Lisa Whited

The economy side of "circular economy" needs to be emphasized. Commerce, capitalism, and how things have been done for so long has been based on the linear economy. Transitioning to a circular one requires shifts in mindsets - rethinking and questioning assumptions.

One of my favorite recent quotes is from a worker at a nonprofit that deploys office supplies and furniture to schools. As he was unloading multiple reams of paper that an office was donating he said, "Why do offices order so much paper?" He had been working at this non-profit for 30 years and he said they always receive so much paper. It reminded me of the scarcity mentality that we have - we have it with supplies, furniture, office space - "Let's get a little more, just in case." We need to move away from that type of thinking and empower those on the front lines that are negotiating office space, purchasing supplies to consider "less." When we have less, it opens us up for so much more (more efficiency, productivity, energy, clean air.)

The economy side of "circular economy" needs to be emphasized.

— Lisa Whited

Jon Strassner

> Ideally, we would own nothing and be merely stewards for the product we use, but that might be a bit too utopian. I think our manufacturers need to find value in keeping their product out of the landfill. And it needs to be a value to the shareholders, unfortunately. How can a company grow and prosper without making more stuff? That is a critical question that we need to answer. We cannot continue to expect infinite growth on a planet with finite resources. It's not good math. I would like to see manufacturers in our industry step up and lead the way in repurposing and re-cycling. I believe we will struggle with it until they are able to resolve it.

Stephanie Barger of US GBC (TRUE)

> We need to eliminate "waste management" plans! Managing waste is the end of the pipe and the loss of materials, finances, staff time is in the past. By focusing on a material, commodity, zero waste plan, our focus is on what and how we are buying. The priority shifts to how it is manufactured, can we recycle or reuse the packaging, what is its value after use, and do we need it in the first place versus just trying to get it in the right bin and away from our offices.

How can a company grow and prosper without making more stuff? That is a critical question that we need to answer.

— Jon Strassner

The Mohawk + Datile Toronto Showroom showcases adaptive reuse of an existing building and responsible sourcing of locally produced materials.

Source: Flat Iron Building Group Inc.

Perspectives: 3 / 3

How can we clear the obstacles to that future?

Associations & Consultants are focused on social change, the biggest obstacle to a circular economy.

Owners & Occupiers are working towards flexible solutions, more accountable suppliers, and cross-functional understanding.

Manufacturers want better collaboration across the industry and policy making that encourages circularity.

Construction & Design firms are pushing designers to speak the language of reuse. No more white boxing!

Resellers & Remanufacturers are pushing to reduce costs, increase incentives, and share success stories.

Technology, Services & Suppliers understand that circularity represents a huge economic shift – and as a result, requires widespread awareness.

Owners & Occupiers

Kenna Houncaren of Stantec

> Storage and move costs can be problematic when organizations look to embrace a circular office. Longer term solutions include employing furniture design solutions that are flexible to suit a variety of office set ups – increasing the probability that unneeded furniture could be redeployed by others. In the short term it is simply about more awareness and expanding our networks of what we have available to organizations in need.

Chris McFarlane of Starbucks

> It would be great for manufacturers to use more recycled materials in their products. It not only helps offices and companies be more sustainable but it creates important demand signals through the recycling value chain.

Tina Burry of General Motors

> To provide the best odds for success, we need to ensure the repurposing process is understood for how future requests for surplus materials are requested and advertised to internal and external entities.

Furniture Manufacturers

Tracy Backus of Teknion

> The built environment and its contributors need to align further on a universal circular economy process that challenges all user groups to work to retain value in the workplace with goals to stimulate design, manage resources, align financially to make the economics work, and invest in infrastructure for change. Our intention for the future is to take the obstacles and make them the opportunities that can be best addressed through education and awareness.

Heidi Frasure of Steelcase

> We all need more involvement in local and federal policy making, lobbying for good policy. What is good policy? Policy that supports actual recycling infrastructure, enables OEMs to reprocess or remanufacture products without making it more difficult than producing new, shares the burden of recycling fees or policies so they don't stifle innovation or have unintended inflationary costs to produce sustainable products.

Dominic Daunter of Haworth

> We need to make sure all the right stakeholders are involved and aligned as an industry. Together we can accomplish more and drive meaningful change.

Jane Abernethy of Humanscale

> Create some alternative design languages for workspaces that aren't all based on everything being shiny and new. This could be an interesting design challenge, but it seems possible. For example, the Brooklyn / Boho style emphasizes that certain elements aren't new and celebrates their authenticity. There could be other creative approaches to developing design language that isn't based around everything being new. Get the idea of using pre-loved materials on designers and clients' radar. Creating some buzz about exciting designs that do this, and the impacts they've reduced.

When Steelcase and Green Standards worked with a global Seattle-based company to redesign their headquarters, we diverted 1,252 tons of furniture, fixtures and equipment from landfill, in part generating a $33,485 in-kind charitable donation. Employees of El Centro de la Raza, a non-profit organization that provides a wide variety of social services to build community and unite all races and people, was one of 13 organizations that benefited from the donation.

Source: El Centro de la Raza

Resale & Remanufacture

Joel Stein of Whole Cubes

> Obstacles is really another name for costs. And, the costs need to shift from the back end, where social and environmental considerations are most adversely affected, to the front-end. Larger corporations again need to lead the way. They have to consider how they can extend the life of their present and future furniture assets through repurposing, refurbishing, donations, and responsible recycling and disposal—budgeting accordingly to do so.
>
> In the manner of clean energy tax incentives, federal and state incentives for refurbished and used office furniture capital expenditures would be a natural way to promote these efforts.

Sam Coggin of Coggin Sustainable Office Solutions

> Businesses need support to understand that a circular approach is not only environmentally responsible but also economically viable. Coggin SOS is committed to demonstrating this reality through our work and through sharing success stories from our clients. As well, we are actively looking for collaborative partners to advocate for legislative and policy changes that favour circular economy models, as well as work towards standardising measurement and reporting of sustainability metrics within our industry. The circular office isn't a distant goal; it's a reality that's unfolding today. With Coggin SOS's dedicated services and the shared commitment of businesses around the world, we are optimistic about this sustainable, regenerative future.

Doug Pilgrim of Davies Office

> We need to educate businesses together on the environmental and financial benefits of circular office furniture. We need to make remanufactured office furniture and furniture donations more accessible and affordable. And we need to partner with manufacturers to raise awareness of the circular economy and its benefits.

The circular office isn't a distant goal; it's a reality that's unfolding today.

— Sam Coggin of Coggin Sustainable Office Solutions

Technology, Services & Suppliers

Lisa Fulford-Roy of CBRE

> Return on investment can be difficult to quantify as there are so many variables between the operations, policy, and behavior elements of a circular economy, not to mention that physical building's limitations. A robust change management and change engagement strategy is needed to create company wide adoption and sustainment. As an internal leader or circular economy consultant, the empowerment to engage with stakeholders is key to success.

Theo Hooker of Cambium Carbon

> In a world where sustainability is now a buzzword, we must all become more shrewd in how we define positive impact. Part of this is setting high standards about the choices we make. Big brands & workplaces have the power to prioritize the choices that might not be as flashy, but that are most important. Many people across the world do not have the resources to move the needle. Companies and countries must hold themselves to a high standard of reducing consumption and prioritizing choices that truly benefit people and the planet.

Adam Guli of Stok:

> To achieve circularity at scale, we need three things:
>
> 1. Continuous education of better ways to develop a building, space, and ecosystem that people will work from. This means working closely with our clients to streamline the construction process with a concerted effort to reduce waste in materials, water, and energy consumption throughout the project process.
> 2. Forward thinking processes development so we consider the after-life impacts of materials and products that go into the buildings and spaces we develop.
> 3. Leveraging advancements in healthier material selections and how work environments can be enabled to showcase a sustainable space for occupants to thrive in.

Gary Diamond of Quantum Lifecycle:

> One large challenge is a preconception that preowned means lesser quality or status, or that devices must be fully destroyed to ensure sensitive data is gone. Quantum educates regularly on how refurbished technology carries warranties and that data erasure through best-in-class security software is the most appropriate and sustainable solution. We need to keep finding unique ways to meet people where they are at with information and share best practices with our peers.

Garry Cooper of Rheaply:

> We face a number of challenges in the widespread adoption of circularity in the workplace, especially for items set for disposition, or stuck in storage. Although our product and engineering teams work to break down these barriers through ongoing development of The Rheaply Platform, we've discovered a number of pain points that require more collaboration and partnership to resolve. There is an over-reliance on archaic legacy solutions that fail to focus on circularity. Similarly, the approach we see for decommissions is often very reactive and last minute. We encourage and empower the organizations we work with to be proactive in their workplace so that when the time comes to remove things, there are better systems and procedures already in place. Time-to-removal constraints often lead to disposal of items that can be reallocated instead of thrown away to a landfill.
>
> When planning for your next decommission, you don't have to have an organization focus on just getting the items out. There are metrics that you can feel empowered to ask for that not only meet your deadlines, but do it in a responsible, and efficient way.
>
> There are challenges to achieving a circular future, but they are far from insurmountable with the right, proactive approach towards connecting all the players in a reuse ecosystem – including manufacturers, service providers, supply and demand partners.

Time-to-removal constraints often lead to disposal of items that can be reallocated instead of thrown away to a landfill.

— Garry Cooper of Rheaply

Allie Butkiewicz of Human-I-T

> We need to create a ripple effect, inspiring more businesses to join the circular economy movement.
> This is not just about reducing waste; it's about creating a more sustainable and equitable future for all. By working together, we can turn this vision into a reality.

Dan Kershaw of Furniture Bank:

> Green Standards and the circular coalition we are building can raise awareness among their clients about the potential second life of items which may be suitable for a domestic setting, increasing the volume of 'home approved' items available for donation. By working together, we can create a greater social, economic, and environmental impact.

Steelcase continues to extend their CarbonNeutral® product certification options across their offerings, offsetting the carbon impact of each chair's entire lifecycle.

Source: Steelcase

Design & Construction

Gary Miciunas of Cuningham

Outdated mindsets are still our largest obstacles. A circular economy will not only help secure a sustainable and resilient future for communities; it will also benefit consumers with better environments, experiences, services, and products. But until people understand this, their behavior will remain difficult to change. Awareness campaigns are needed to educate people about what it would mean to work at a circular workplace and how it would diminish the harm caused by a "take, make, and waste" approach to consumption. Business leaders need to understand that designing for a circular workplace is a strategic imperative that can unlock innovation, open doors to emerging markets, create consumer loyalty, and reduce costs. The success of a circular workplace depends on effective collaboration between businesses, governments, and the public. It requires a willingness to adapt. In order to successfully transition away from a linear consumerism model, we need deft communication strategies that convince businesses and the public to change the way they work and expect more from their workplaces.

Outdated mindsets are still our largest obstacles.

— Gary Miciunas of Cuningham

Benjamin Holzinger of Gensler

The A&D industry must provide educational opportunities for designers to understand the challenges of designing with reused FFE. Today, designers – for the most part – do not speak the language of reuse. How much is available, where is it, what to do if you need 50 chairs and only 45 are available, who handles logistics, when is it available, what to do about missing/broken parts, can it be refurbished to factory standards to be "like new," and in a world of shorter timelines and the need to deliver projects quickly – can the project acquire these on time?

Chantal Frenette of M Moser

Clearing obstacles for the future requires a concerted effort to break free from established norms and foster a mindset of innovation and adaptability. This requires a multi-faceted approach that involves shifting mindsets, redefining processes, fostering creativity and resilience, and leading by example. We can shape a future characterized by innovation, adaptability, and sustainable design practices by challenging traditional norms, embracing change, and viewing barriers as opportunities.

Silvia Aranda of JLL's Tétris

Better collaboration and communication across the industry will be key. The unifying movements around the circular economy will be decisive in connecting the different players and promoting this "collective partnership" mindset.

Reuse sources must be easily accessible, sufficient quantities must be available, and they need to be affordable so that it makes financial sense for widespread uptake. The network of players will need to communicate as effectively as possible in order to identify these resources and create simple, effective contact flows.

Julie Phillips of Flat Iron

The biggest obstacles to a more sustainable building sector and the circular workplace are:

- Building owners and landlords do not fully appreciate the benefits of retrofits and only see the costs.
- The technical knowledge – including a construction perspective and design-for-circularity expertise – required at the planning stage is absent.
- There are barriers – or a lack of awareness – to accessing grants and financing that support circular alternatives.
- The siloed approach to architecture, engineering and construction leaves critical decisions that could dramatically affect the climate impact of the project too late in the process to effectively implement.

Utilizing small wood pieces that are typically discarded within the milling process, Cambium Carbon helped create an award-winning architectural installation at The Wilson office building in Bethesda, Maryland.

Source: Cambium Carbon

Associations & Consultants

Steve Kooy of BIFMA

> Bringing government regulators, owners, manufacturers, and service providers together is crucial for the creation of a unified and forward-thinking approach towards circularity. As we transition from the traditional linear model to a more efficient circular economy, it becomes essential to recognize existing efficiencies while identifying areas that require strategic pivots for the viability of circular economies. It all begins with a fundamental shift in perspective – approaching products and spaces with a fresh timetable and reevaluating their inherent value.

Stephanie Barger of US GBC (TRUE)

> Mindset is the biggest obstacle to a circular economy. Recycling myths, apathy, lives too busy to act, confusion of what is recyclable and not recyclable: All these factors make it very challenging to reach zero waste.
>
> The beauty of businesses focusing on zero waste is they have a huge audience: employees, vendors, service providers and customers. Although it is great to have a "Zero Waste/Green" team, we need to educate and empower all our employees and stakeholders.

Jon Strassner

> We need to re-define beauty so that our industry starts to recognize and reward those spaces that have decided new, bright and shiny isn't always the best path forward. I would love to see us at a place where designers are taking their clients into messy spaces and asking "What can we save? What can we clean up, refurbish, re-finish and re-use?" It's not about landfill management anymore, it's about embodied carbon. We can truly have an impact on this climate disaster if our industry can take on carbon. It's a huge opportunity.

Lisa Whited

> When I was researching for my book I learned that the tipping point for social change is 25%. That statistic gave me hope. We don't need a simple majority of 51% to make this change - we just need to hit 25%. The other good news is that 8% of people will change their behaviors because it is the right thing to do. So, if we already have 8% and we are trying to hit 25%, then what we need to do is find the 17%. So, don't try to bring awareness to everyone, just find your 17% that are open to doing things differently. Once we get them, along with the 8% who already will do the right thing, we'll be on our way to making the change we want to see.

Conclusion: Coming Full Circle

I'll admit it: When we first considered how we could apply the principles of the circular economy to the office, we had our doubts. Not about eliminating waste: There's no doubt that our track record of 98.6% landfill diversion does that. Nor about circulating products and materials at has highest value – for example, the furniture we've taken out of General Motors offices has gone right into use in Detroit public schools.

It's the third principle that stopped me: Regenerate nature. Yes, keeping materials in use means there's less need to extract raw materials, but that seems pretty abstract when you're sitting in a gleaming office tower in a major metropolis.

But I'll tell you what's not abstract: The work that the 25,000 non-profits and schools in the Green Standards Charitable Network do every single day in communities around the world. The Tahirih Justice Center helps immigrant survivors fleeing gender-based violence, and they've built a comforting space in the Bay Area thanks to one of our clients. The donations that our client Charles Schwab directed to the Foothill Community Health Center in San Jose, Calif., meant they could direct valuable dollars towards providing medical care to 150 more low-income residents. And more than 200 Habitat for Humanity chapters around the world have put office furniture from our work into new homes.

When I think of regenerating our natural and built environment – our workplace-inspired variation of the circular principle – I think of these worthy beneficiaries. This is how the circular workplace supports those who are regenerating our communities while reducing the need for resource extraction.

Thank you for your interest in circular workplaces. I know they can work because I've spent my career making them happen. The fact that we now have so many partners in circularity gives me hope that together, we can close the loop.

Trevor Langdon
CEO, Green Standards
tlangdon@greenstandardsltd.com

This is how the circular workplace supports those who are regenerating our communities while reducing the need for resource extraction.

What we can do next.

1. **Scale it up.** The audacious yet achievable goal: A circular real-estate portfolio.

> "One circular office is a good start, but sustainability really requires scale. That's when you'll maximize economic, environmental, and social value." – *Trevor Langdon, CEO, Green Standards*

2. **Do the math.** While complex, carbon accounting underlines the case for circularity.

> "Calculating the carbon impact of all products, whether construction materials, lighting fixtures, flooring, or furniture, from pre-installation to post-dismantling, is critical to successfully achieving sustainability commitments." – *Adam Guli, Director of Integrated Services, Stok*

3. **Brag about it.** Talking about Circular Workplaces is the first step toward creating them.

> "Lastly, and most importantly, we need to get the message out and educate. In a world engulfed with climate change, how do we connect the dots between our impact on the environment and a circular economy?" – *Rives Taylor, Principal, Resilience Research Center, Gensler*

Want to get involved?

info@greenstandardsltd.com

Acknowledgements & Copyright

Green Standards is a global leader in sustainable decommissioning, helping more than 25% of 2023's Fortune 100 keep their furniture, fixtures, and equipment out of landfill during times of workplace change. We work closely with corporate real estate leaders around the world, and they are increasingly asking us about circularity. This report was inspired by the circularity and sustainability champions from our partner organizations.

Reference: Langdon, T. and Errett, B. (2023). The Green Standards State of The Circular Workplace. Toronto.

Green Standards

circularworkplace.com