

# Sustainability Standards in Practice

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Findings from the 2025 iCA  
Summer Member Webinar Series

# Goals & Summary

## Goals

Each week over the summer of 2025, the iCA delivered expert-led, candid webinars focused on key iCA topics of critical sustainability challenges in our industry. These interactive sessions focused audience participation, aiming to explore and uncover insights into how digital infrastructure can be designed or upgraded to reduce environmental impact.

The closed-door, members-only sessions examined effective sustainability metrics and standards, as well as how organizations are integrating sustainability into their infrastructure strategies and long-term planning.

## Summary

The initiative saw strong engagement, with an average weekly attendance of 30+ participants. Active involvement came from all three iCA Working Groups, the iCA Governing Body, and iMasons Leadership—bolstered further by 45 speakers representing over 40 companies. Additionally, guest organizations and iCA Strategic Alliances participated, including Open Compute Foundation (OCP), MEP 2040 Commitment, Global Electronics Council (GEC), Sustainable Solutions Corp, Megalab, Megawatt Consulting, ClimeCo, and Concrete Transition Capital.

This dedicated participation and presence contributed to robust discussions week-over-week, enriching the iCA's dialogue with diverse expertise and perspectives.

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# Series Kickoff / iCA Objective 1: Company Climate Strategy & Maturity Model

## Featured

[Louis Liu \(Rehlko\)](#), [Mark Chen \(Skanska\)](#), and [Sara Neff \(Microsoft\)](#)  
Moderated by [Miranda Gardiner \(iMasons Climate Accord\)](#)

## Summary

The industry continues to face hurdles in scaling climate strategies, from data gaps on embodied carbon in MEP systems to overlooked construction-phase water use and limited clean energy access in rural sites. To address these challenges, Environmental Product Declarations (EPDs) and [Building Transparency Database](#) are advancing transparency and enabling sustainable procurement, particularly in reporting and decarbonizing Scope 3 (value chain) GHG emissions.

AI is emerging as a powerful enabler, automating tasks ranging from inventory analysis and leak detection to concrete mix optimization, while translating business data into actionable environmental insights. These applications increase efficiencies, free up teams, and accelerate climate actions. At the core, collaboration across internal teams, external partners, and supply chains remains essential to maturing disclosures, driving accountability, and scaling decarbonization impacts across the digital infrastructure industry.

# Energy Transition & Community Engagement

## Featured

[Tom Quinn](#) ([Google & iCA Power Working Group Vice-Chair](#)), [Jim Davis](#), [Phil Reid](#) ([RED Engineering Design](#), an [ENGIE](#) company), and [Dhanushka Tennakoon](#) ([RE24](#)); moderated by [Josh Hatch](#) ([Brightworks Sustainability](#))

## Summary

Technology is advancing at lightspeed, yet energy systems, especially zero-carbon power, aren't fully equipped to keep pace. Oil and gas still play a necessary role in today's energy mix, as the shift to fully carbon-free power is constrained by cost, supply, and infrastructure readiness. The focus now must be on future-proofing: designing flexible, scalable systems today that can seamlessly transition to cleaner energy tomorrow. Despite massive investments from Big Tech in renewables, regulatory and geographic challenges, as well as limitations of legacy infrastructure, continue to pose significant hurdles.

Key areas of focus include aligning high-demand digital infrastructure with regions offering higher carbon-free energy (CFE), supporting true additionality in clean energy procurement, and solving for grid-wide solutions rather than fragmented approaches like rooftop solar. There's a growing awareness around the need to integrate waste heat recovery and improve local network connectivity when siting data centers. Policy and performance measurement frameworks also need to evolve to reflect not just site-level efficiency, but overall environmental impact. As initiatives like the EU's €200B digital sovereignty plan and U.S. DOE's identification of federal sites for AI infrastructure roll out, location and system adaptability will be central to success.

# The Future of Power and Investment in a Cleaner Grid

## Featured

[Kathleen Kauth](#) (Mantle Climate), [KC Mares](#) (Megawatt Consulting), [Chris Baughman](#) (Meta Platforms Ltd), [Austin C. Wentworth](#) (STX Group), and moderated by iCA Power Working Group Chair, [Michael Donohue](#) (Oklo Inc)

## Summary

The grid is reaching a critical tipping point as it's straining under the weight of explosive demand, particularly from data centers and AI-driven infrastructure. The system is not built for scale, speed, or the sustainability goals we are aiming for—already 50% powered by natural gas—with coal offsets and a limited supply of renewable natural gas. The need for an “all-of-the-above” solution is clear: we must simultaneously modernize grid infrastructure, expand clean energy capacity, and address transmission bottlenecks. However, the disconnect between site-level development and broader corporate energy strategies remains a serious challenge, slowing progress toward cohesive, sustainable outcomes.

Recent legislation in Oregon highlights a shift in accountability, signaling a more equitable model but also revealing industry tensions. While some hyperscalers welcomed the bill, which requires large energy users to help fund grid upgrades, efforts to spread costs to other industrial users were blocked. As data centers become integral to the grid, the need for shared responsibility, system integration, and community impact mitigation becomes urgent. Sustainability remains on every CEO's agenda not just as a moral imperative, but because it makes financial sense. Still, public trust is key. The path forward demands smart policy, strategic leadership, and an unwavering focus on resilience and climate responsibility.

# Green or Greenwashed

## Featured

[Alex Rakow](#) (Schneider Electric, iCA Equipment Working Group Chair), [Kim Shinn, PE, LEED Fellow](#) (MEP 2040 Commitment), [Holly Elwood](#) (Global Electronics Council), and moderated by [Loren Long](#) (Clear Sustainability)

## Summary

The concept of a carbon label sparked the formation of the iCA, as leaders sought a consistent way to disclose the carbon impact of equipment. A major challenge was the lack of standardized methods for measuring emissions, which led to a push for transparency and education through case studies. Projects like the embodied carbon roadmap for mechanical systems brought together dozens of building types to better understand emissions across climate zones. Ecolabels for electronics demonstrated how upstream and downstream impacts—like responsible sourcing and end-of-life recycling—could be integrated into product standards, with global uptake and third-party verification helping drive progress.

Despite growing interest, the biggest hurdle remains the inconsistency in how emissions are calculated, and cross-collaboration would go a long way to resolution. Tools and data need to improve, starting with clear, agreed-upon rules that many sectors are still hesitant to develop due to competition or IP concerns. Some large companies are pushing ahead with aggressive reduction targets and tying procurement decisions to carbon impact, helping drive change across the supply chain. Still, more transparency is needed, especially from operators holding key data under NDAs. Industry experts could also benefit from evaluating other industries (like automotive manufacturing) to study how other companies have addressed similar issues. Progress depends not just on policy, but on market demand, aligned messaging, and a willingness to act before everything is perfect.

# iMason Climate Accord & OCP: Carbon Disclosure Project Update

## Featured

[Andrea Desimone](#) (Schneider Electric), [Ryan Cornwell](#) (Google), [Lalit Joshi](#) (Microsoft), and [Howard Hsu](#) (Meta Platforms Ltd); additional thought leadership from [Rob Coyle](#) (OCP), [Shruti Sethi](#) (Microsoft), [Petya Miteva](#) (formerly Meta), and [Kellie Jensen](#) (EVgo)

## Summary

The industry is still grappling with a lack of consistent, standardized data for measuring and disclosing carbon emissions, especially across digital infrastructure. In response, iCA has been leading efforts to create a “nutrition label” for carbon emissions, starting with a base specification that outlines minimum data requirements without labeling products as “good” or “bad.” This specification, which will live within OCP (Open Compute Project) resources, isn’t a data collection tool but a guidance framework to streamline and align embodied carbon emission disclosures across suppliers, operators, and procurement processes. The aim is to move from just having labels to broader disclosure practices and eventually integrating standards into RFPs, contracts, and purchasing decisions.

The journey is collaborative and long-term, involving everything from supplier education to investment in developing methodologies, tracking tools, and case studies. While mature organizations are leading the charge, engaging lower-maturity suppliers is essential for broader adoption. Incentives, collective purchasing power, and clear RFP language can help bridge the gap. Creating aligned pathways help and encourage companies measure, disclose, and improve carbon performance over time—despite regulatory uncertainty and supplier fatigue. The belief remains strong: once you start tracking, you start improving.

# Supplychain Decarbonization Call

## Featured

[Morgan German, P.E., CSP \(Microsoft, iCA Materials Working Group Co-Chair\)](#); [Peter Kelly \(Tate\)](#); [Roland Ruprecht \(Teknor Apex Company\)](#); [Tad Radzinski, PE, SEP, LEED AP, SFP \(Sustainable Solutions Corporation\)](#)

## Summary

Adopting sustainable solutions across the data center and construction ecosystem faces several layered challenges. While technology providers and manufacturers are pushing innovations (such as alternative polymers or microbiologically-derived materials), the transition from pilot to scale remains slow. One of the biggest hurdles is aligning performance definitions across sectors (data centers vs. other buildings), ensuring that sustainability is integrated early in the design process, not just during procurement. Tools like the Materials Working Group and Maturity Model help guide this, but suppliers still face frustration when sustainability reporting feels like a box-checking exercise rather than a path to meaningful change. There's growing emphasis on EPDs as the gold standard, though variations exist (e.g., Schneider's PEPs), and the carbon market remains loosely defined, making accountability and intentionality harder to enforce.

To overcome these barriers, there's a call to embed sustainability into core business operations, streamline data comparability, and make it easier for suppliers to contribute meaningfully. That includes shortening timelines for adoption, increasing funding for early-stage technologies, and fostering stronger collaboration between owner-operators, suppliers throughout the entire value chain, and local communities. Durability, resiliency, and second-life design must be factored into every product. AI tools and frameworks like GRESB are helping with standardization, but a cultural and structural shift is still needed: sustainability

# 1:1 with iCA Governing Body Member Charlie Sellars

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[Charlie Sellars \(Microsoft\)](#) and [Miranda Gardiner \(iMasons Climate Accord\)](#)

## Summary

The conversation around sustainable digital infrastructure is shifting towards maximizing positive outcomes and supporting responsible growth by borrowing frameworks from sectors like clean energy where certificates, internal carbon fees (like Microsoft's 2020 carbon fee), and standardized protocols have driven industry-wide change. A "gaming mindset" encourages creativity and momentum, helping build confidence in sustainable purchasing and infrastructure decisions. Projects like Microsoft's partnership with Sublime Systems to scale "virtual green materials" (623K tons of low-carbon cement) exemplify the kind of bold moves needed to scale market investment. As part of iCA's governing body, contributors see the value of collaboration, case studies, and evolving metrics to turn promising dialogue into industry-standard action. But there's room to push further, particularly in areas like EAC financing, defining effective EPDs for AI, and using real-world data consistently across tools and protocols.

As digital infrastructure grows into a near-utility role, Scope 2 thinking should include emissions and resource use tied to AI and cloud systems. The water-energy nexus adds a layer of complexity; for example, liquid cooling increases efficiency but also changes water consumption patterns between datacenter and grid operators, raising questions about water withdrawals, consumption, and replenishment. Standardization is key: when every company builds its own tool or methodology, it fragments progress. Using agreed-upon standards like ISO 14025 for LCAs and aligning on disclosure practices (for carbon and water) will help keep the industry moving forward in a unified way. The call to action is clear: build with intention, measure with consistency, and scale the solutions that are working.

# Collaboration with Delivery Partners for Impact

## Featured

[Brian Jabeck](#) from [Bennett & Pless, Inc.](#), [Bill Hassel](#) from [Turner Construction Company](#), [Pete DiSanto](#) from [Enchanted Rock](#), and [Matt McMullen](#) from [Nalco Water, An Ecolab Company](#)

## Summary

Meeting day-one power and water needs is increasingly complex as data centers become denser and adopt technologies like liquid-to-chip cooling. Multiple infrastructure workstreams now move in parallel, requiring tight schedule coordination and integrated planning. There's growing momentum around adaptive reuse of existing facilities and manufacturing sites, but the rapid evolution of digital tech makes future-proofing a challenge. Pilots are no longer enough; the focus must shift toward scalable deployment and broader cross-sector collaboration to keep pace without sacrificing sustainability goals.

To maintain speed while progressing sustainably, the industry must adopt a “try, save, and scale” mindset by testing new approaches while banking efficiency gains and reinvesting in innovation. Advances in battery storage and next-gen solar panels are helping, and sectors like mining in South America are already proving the viability of electrified equipment. Construction and digital infrastructure must follow suit. The key lies in identifying what's feasible today and mapping stepping stones toward broader electrification and low-carbon construction practices, all while balancing operational demands with long-term sustainability.



# No Asset Left Behind: Portfolio-Wide Action Toward Data Center Sustainability

## Featured

[Josh Hatch](#), [Jessie Scott Templeton](#), [Elena Goldstein Lake](#), and [Sunni Wissmer](#) from [Brightworks Sustainability](#)

## Summary

Sustainability across data center (DC) portfolios requires an integrated approach to manage energy, water, waste, embodied carbon, and community impacts. As growth accelerates, especially among hyperscalers and colocation providers, pressure from investors, regulators, and customers is driving adoption of clearer goals, accountability systems, and tools like LEED, GRESB, SBTi, and KPIs. Activity-based carbon reporting offers more accurate insights than spend-based methods, helping teams focus reductions effectively. Embedding sustainability into early design stages and aligning corporate goals with project-level execution are critical. Successful strategies include setting clear expectations with contractors, using performance awards, collecting data to improve over time, and supporting sustainability staff's integration into operational decision-making.

There's a gap between leaders who have mature energy procurement and net-zero goals and other developers or outsourced builds, which often lag in areas like embodied carbon and waste. LEEDv5 is a useful tool that aims to close this gap with stronger requirements around carbon, resilience, and reuse. Mass timber is being explored for admin areas, but supply chain and certification challenges remain. Reuse of salvaged wood and circular design thinking are gaining traction, supported by collective buying power to shift markets toward low-carbon materials. Ultimately, sustainability should be embedded early, backed by management systems, and aligned with speed-to-market demands to meet growing regulatory, investor, and customer expectations.

# Scaling and Financing Low-Carbon Concrete

## Featured

iMasons Climate Accord Governing Body member [Noah Goldstein](#) (Google, iCA Governing Body member), [David Prieto](#), ClimeCo; [Madison Savilow](#), Carbon Upcycling Technologies; [Jason Adams](#), MEGASLAB®; [Miles Haladay](#), Concrete Transition Capital

## Summary

Concrete, the world's second most used substance after water, is responsible for roughly 8% of global emissions, with the vast majority stemming from cement production. Despite its ubiquity, concrete often flies under the radar in sustainability discussions. The emissions are primarily tied to kilns and feedstocks, though promising solutions like carbon capture, alternative SCMs (supplementary cementitious materials), and low-carbon cements like LC<sup>3</sup> are gaining traction. Yet, many of these innovations remain stuck in pilot stages, slowed by industry conservatism, lack of scalable financing, and uncertainty around specs, performance, and timelines. There's a strong push to bring buyers, engineers, and specifiers into the same conversation to accelerate adoption, address workability concerns, and ensure performance requirements (especially for critical infrastructure like data centers) are met.

Progress will require more field trials, collaborative coalitions, and mock pours to build confidence and prove durability at scale. Strategies like thoughtful design efficiencies may offer even bigger emissions savings than SCM swaps alone, reducing material use without compromising structure. Engineers and general contractors must shift their mindset from fear of the unfamiliar to openness toward innovation. There's also interest in newer alternatives like ground glass pozzolans or regenerative biopolymers, though building code compatibility and rebar replacement remain open questions. The digital infrastructure sector is showing strong leadership in low-carbon concrete adoption, and can support the entire industry by sharing standardized data, smart procurement language, and a central repository of proven solutions. Most critically, the sector must figure out how to finance this transformation at scale.

Overall, there is a role for the iCA to support the deployment of new materials through industry engagement on specifications, procurement guidance, and market insight.

# EU/UK Regulatory and Reporting

## Featured

[Sarah Peterson](#) (Clear Sustainability), [Cara Mascini](#) (Switch Datacenters); [Anna Dowson](#) (GreenScale Data Centres); [Graham Langton](#), CTS Group

## Summary

Amid evolving regulations like the EU Omnibus and shifting federal sustainability approaches, there's growing tension between the need for flexibility in reporting and the demand for consistency in long-term sustainability strategies. While compliance is critical, the message from industry leaders is clear: don't just meet the bar, but go beyond it. The redundancy of overlapping but slightly different sustainability requirements is creating churn, but many companies are focusing on local site-specific strategies that align with broader regional or global goals. The sustainability movement has always come from a "beyond compliance" mindset, especially in the tech sector, which has historically led rather than waited for regulation.

There's a strong business case for staying the course on sustainability, regardless of political shifts or regulatory delays. Climate change is already raising insurance costs, straining operations through extreme weather and resource scarcity, and threatening long-term business continuity. In this context, sustainability is not just about environmental benefit or regulatory box-ticking, it's about operational resilience, risk mitigation, and future-proofing. As the European Parliament debates extensions and simplifications in Omnibus trilogues, the industry must avoid falling into the "compliance-only" mindset and continue to drive innovation, efficiency, and decarbonization.

# iMasons & iCA Leadership Conversation

## Featured

iCA's Executive Director, [Miranda G. Gardiner](#), LEED Fellow; Infrastructure Masons' CEO [Santiago Suinaga](#) with iCA Governing Body members [Julie Lieb](#) (Meta Platforms Ltd) and [Anna Timme](#) (Schneider Electric)

## Summary

With an exciting lineup of industry events on the horizon this Fall—ranging from Yotta and iMasons awards to global gatherings like Schneider Electric's Innovation Summit, Climate Week, DCD Connect events across multiple continents, and more—the leaders during this session expressed their hopes and goals for these key opportunities for the iMasons/iCA network to engage deeply in learning, collaboration, and driving progress across energy, sustainability, and digital infrastructure sectors. From local chapter initiatives in Denver to global rollouts like iMWomen in Brazil and the UAE, momentum is building everywhere.

The iMasons and iCA communities are leaning into new and existing critical initiatives (iMasons Job Matching Platform and OCP-iCA partnership), sustainability standards (piloting GRESB data center reporting framework), and industry-specific supply chain decarbonization collaboration and acceleration. While data availability and accuracy can be a challenge, it is not and must not be a barrier to aggressive action. Through strategic alliances, aligned data frameworks, and a shift in mindset, the goal is to embed sustainability into the DNA of digital infrastructure. Ultimately, this is a global, shared journey requiring bold leadership, collaborative solutions, and a commitment to setting high standards others can follow.