

Conference + Expo22

FRIDAY
OCTOBER 21st

DoubleTree
Mission Valley



SAN DIEGO
GREEN
BUILDING
COUNCIL

www.sd-gbc.org

WELCOME MESSAGE

After three years, everyone here at the San Diego Green Building Council is very excited to welcome you back to our Green Building Conference + Expo! We can't wait to dig into the twelve educational sessions selected to inspire us all to greater action toward our vision that our buildings and communities will regenerate and sustain the health and vitality of all life within a generation.

By bringing you new ideas and technologies and highlighting innovative strategies we hope to amplify our community's progress and inspire you with insights and actionable information to invigorate your work and life. Thank you for joining us at today's event and I hope you connect with some new ideas and people!



Colleen FitzSimons, PMP, GPR, LEED AP BD+C, ID+C
SDGBC Executive Director



I am grateful and excited for the San Diego Green Building Conference and Expo this year, and to engage in a day of deep conversations about the built environment with our community of local experts. After years of growth of this program through 2019, due to COVID and GreenBuild coming to town, we're coming back to this event after three years! It is imperative that we foster dialogue from all stakeholder groups, and share stories, opportunities, and lessons learned - in order to affect continuous improvement in our region and respond to the urgency of climate and social change that we are experiencing today. Thank you for joining us as members, attendees, presenters, and volunteers to make the SDGBCE22 a successful and inspiring conference, and a big thank you to the SGDDBC staff for hosting this year's event.

Our mission is to Inspire, Educate, and Collaborate within our community to transform our built environment to true sustainability - and this conference and your involvement are a big part of our programming. I'm excited to connect, reconnect, learn, share, and grow with all of you at SDGBCE22!



Ravi Bajaj, WELL AP, LEED AP O+M, BD+C, ID+C
SDGBC Board President
Principal, ESG & Sustainability, Citadel EHS



ABOUT US

The San Diego Green Building Council (SDGBC) is a community of building industry professionals and sustainability advocates with expertise in areas such as architecture, construction, design, urban planning, policy, and more. We work together to promote sustainable building and community practices to bring the San Diego region closer to achieving its climate, water, waste, and energy goals.

The San Diego Green Building Council is a registered 501c3 community benefit nonprofit organization (documents accessible through our GuideStar profile). With national relationships with the US Green Building Council (as an aligned community) and the International Living Future Institute we provide local connections through partnering non-profits and local governments.

Our programs and initiatives continue to expand as we see needs within the community for connection, education and hands-on learning opportunities.



We re-launched the San Diego Regional Green Business Network to provide green business support and certifications under the California Green Business Network's certification program.



Seeing a need for people to better understand induction cooking, in 2021 we created the Electric Home Cooktop program, loaning out portable induction cooktops for free!



The Building Positive Movement (BPM) committee launched with the purpose of producing podcasts about regenerative practices and ideas.



The Women+ In Green and Equity Advisory committees started the Building Connections Mentorship Program, now with its second cohort, to build professional relationships and support a more diverse and inclusive workforce in the building and environmental fields.



The Residential Green Building committee has continued with new Green Homes Tour events throughout the year with different neighborhood focuses.



Green Apple Day of Service along with our Green Assistance Program provides volunteer and hands-on learning opportunities in support of local schools and non-profits.

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**Bryon Stafford, Charles Loffland, Citadel EHS,
Miranda Gardiner, Tom Abram & Susan Rodgers**

SCHEDULE



SAN DIEGO CITY COUNCIL PRESIDENT SEAN ELO-RIVERA KEYNOTE!

Council President Sean Elo-Rivera proudly represents San Diego's 9th City Council District and is committed to the realization of his vision of "Opportunity for All."

8:00am - 8:30am	Registration & Expo Hall (Foyer) & Breakfast (Deck)
8:30am - 9:15am	Welcome & Opening Keynote with SD City Council President Sean Elo-Rivera (Great Rooms I-IV)
9:45am - 10:45am	Breakouts
11:15am - 12:15pm	Breakouts
12:15pm - 1:15pm	Expo Hall (Foyer) and Lunch (Deck)
1:15pm - 2:15pm	Breakouts
2:45pm - 3:45pm	Breakouts
3:45pm - 4:30pm	Expo Hall (Foyer)
4:30pm - 7:00pm	Happy Hour and Networking (Deck)

This year we encourage you to explore the four pillars of our mission: Decarbonization, Health & Wellness, Equity and Water Reuse. We have used icons to indicate which of these four topics are covered in each session. Feel free to stick to one topic or hop around and explore all four, there is plenty to choose from!

9:45 AM - 10:45 AM

ES(H)G: Incorporating Health and Humanity into an ESG Strategy for Buildings and Organizations

Marika Erdely (Green EconoME), Jaime Nack (Three Squares Inc), Keely Felton (NOVA Group),
Jennifer Bertholet-Jelovic (A SustainAble Production), Ravi Bajaj (Citadel EHS)

Great Rooms I-111



GBCI#
920026748

This panel discussion with an ESG, WELL, Sustainability, Energy, and Building Sciences collaborative team addresses best practices in health and wellness and resource conservation for the built environment. Today's hyper-focus on ESG and climate resilience brings a new imperative to focus on issues such as greenhouse gas emissions, energy and water use, and climate risks. While these resilience strategies build a better future, it's time to also focus on the missing "H", Health and Humanity. This session will share strategies, solutions and case studies that explore core principles of continuous improvement and ESG metrics as they relate to energy, water, and indoor environmental quality; and expand our conversation into incorporating health and wellbeing from organizational goals down to building programs.

Integrating Algal Technologies in the Urban Environment for Cutting Edge Circular Economy

John Bucur (Airbuild), David Gory (Airbuild), Himanshu Mohare (Airbuild), Richard Mariita (Airbuild)

Great Room IV



GBCI#
920026749

In this session you will hear about how Airbuild is integrating algae into the built environment that allows it to act as a detoxifying medium for humanity's activities. Algae is a natural resource proven to have amazing traits for growth, carbon dioxide sequestration, and water filtration under the right conditions and control. These conditioning and control methods present themselves in the form of engineered housings that are fastened and assembled on built environment features such as parking canopy's, roadway sides, bridges, and buildings. Water filtration is a component that enters the conversation due to algae's requirement to have a source of flowing water. Integrating algae growth housings into many forms of the built environment create breakthrough changes and possibilities for architecture, engineering, and design of the future.

Affordable Access to Equitable Solar for San Diego (and Beyond)

Eddie Price (San Diego Urban Sustainability Coalition), Fabiola Lao (Center for Sustainable Energy),
Mai Fang (Center for Sustainable Energy)

Shutters West



GBCI#
920026751

In this session you will learn how the Solar on Multifamily Affordable Housing (SOMAH) and Disadvantaged Communities Single-Family Affordable Solar Housing (DAC-SASH) programs incentivize solar panel installation on single-family and multi-family residences and provide green workforce development opportunities across California. The newer San Diego Solar Equity Program (SDSEP) is focused on providing access to solar for San Diego residential customers in Communities of Concern, as defined by the City of San Diego's Climate Equity Index. Collectively, these programs have millions of dollars to provide financial incentives for residents that need it the most. Furthermore, the San Diego region has the potential to unlock the benefits of these programs while making strides in achieving decarbonization, equitable development, and clean energy goals.

11:15 AM - 12:15 PM

Challenges to Urban Greening: A Case Study in Urban Forestry

Kurt Peacock (Tree San Diego), James Berry (Tree San Diego),
Ernesto Romo (Downtown San Diego Partnership), Elektra Fike-Data (Tree San Diego)

Great Rooms I-111



GBCI#
920026745

This panel discussion highlights the importance of urban forestry development, challenges of urban greening, and proposed solutions to utilizing trees to bring co-benefits and offsets into the urban interface. An evaluation of the use of trees and the expansion of the urban forest will include the relationships of trees to urban heat islands, habitat restoration, energy reduction, and quality of life/views. Panelists will speak to the complexities of planting trees throughout San Diego County (published case study expected in Winter 2022), how partnership has provided solutions, and what changes will need to occur in order to continue planting a robust, sustainable urban forest for the benefit of the community and the environment.

The Critical Role of Onsite Water Reuse in Sustainable Building Practices

Eric Hough (Epic Cleantec)

Great Room IV



GBCI#
920026746

This session will discuss how severe drought is increasingly drawing attention to an often overlooked topic of sustainability: water resilience. Attendees will learn about full resource recovery, water security and the cost-savings benefits that make onsite water reuse an essential component of building sustainability practices. The session will provide participants with an overview of local onsite reuse technology, including the implementation of a blackwater reuse system, as well as strategies to reduce first costs, incentive programs options and an in-depth look at what to expect during the permitting process in San Diego.

Shaping and Molding Energy Policy in California: Be an influencer not a reactor

Josh Dean (California Energy Alliance), Charles Knuffke (Wattstopper/Legrand), John Busch (Leviton)

Shutters West



GBCI#
920026752

Energy codes, standards and policy are often viewed by manufacturers, specifiers, and builders as necessary evils, factors that get in the way of executing building projects. Few of us realize the essential nature of the regulatory function of government - policy and regulations drive markets. California's Building Energy Efficiency Standards (Title 24, Part 6) have undergone one of the most significant updates in many years for the current 2022 code cycle and will look to incorporate additional decarbonization strategies in the 2025 cycle.

This panel will explain the 2022 Title 24 changes and updates, and how they impact the building industry today. They will demonstrate the mechanisms behind evolving better codes and standards; provide an overview of what factors to consider when planning products and projects; and discuss the building sector's role in grid modernization and decarbonization.

1:15 PM - 2:15 PM

Elevating the Human Experience with Biophilic Design Utilizing Modular Construction

Matthew Porreca (LPA Design Studios), Matt Winter (LPA Design Studios)

Great Rooms I-111



GBCI#
920026750

This session will focus on the occupant experience developed in the design process which embraces biophilic principles to promote health and wellness. The session will explore a few case study modular housing developments under construction and in design in San Diego which includes the El Cerrito Housing Development and the Newton Ave Housing Developments. The design for the El Cerrito mixed use development embraces the use of single use recycled shipping containers as a rigorous module in its five levels of housing on the upper floors which will be prefabricated modular units constructed off site. The use of modular construction innovates at every step of the delivery model from design, documentation, permitting to construction in promoting a lean delivery process in reducing the overall schedule. The design for this project utilized several strategies which elevate the human experience through social interactions starting at the street level with the entry courtyards, within the elevated roof gardens and with the community garden on the upper level. The integration of landscape with architecture embraces biophilia in connecting people with nature to promote health and wellness

Horton Plaza - Bringing Sustainable Scientific Innovation to Downtown San Diego

Calina Ferraro (Integral Group), Ransom Hamrick (Integral Group)

Great Room IV



GBCI#
920026755

This session is a deep dive into the case study of the Campus at Horton, exploring the design strategies, the challenges faced in converting an existing structure and in delivering life science tenant space in a high-rise tower, all while targeting the highest levels of sustainable performance and zero-carbon operation. Currently in construction, the Campus at Horton is a transformation from the iconic outdoor mall to a new nearly 1 million SF mixed-use campus, including a 10-story high-rise, all-electric, life science tower. Targeting LEED Platinum, this new life science tower will incorporate airside and waterside energy recovery, variable controls and sensing for lab exhaust, and air-source heat pumps for heating and to supplement the campus chilled water central plant, and a photovoltaic and battery storage energy system.

DPR + JUST: An Exploration Into The Process of Earning a JUST Label (Shutters West)

Cari Williams (DPR Construction), Marissa Tyer (DPR Construction), John Ambert (DPR Construction)

Shutters West



GBCI#
920026747

This session will explore the process of earning a JUST label for a construction company with over 7,500 employees. The DPR team will explore how the process came about with support from the San Diego Living Future Collaborative, the steps required to align with the rating system, and the challenges and opportunities in utilizing a transparency platform around social justice and equity within the Construction space. Attendees will learn about where social inequities exist in Construction, how the company adjusted its organizational practices to align with the indicators and levels of performance in JUST v2.0, and some of the learned lessons of going through the JUST labeling process.

2:45 PM - 3:45 PM

Symbiosis: A Patient-Centric Approach to Sustainable Healthcare Facilities Using Biology

Eric Corey Freed (CannonDesign)

Great Rooms I-111



GBCI #
920026754

In this brand new talk for 2022, we'll explore a new approach to achieving high performance educational facilities using a symbiotic mindset. We'll explore the six categories of symbiosis: Systems, Senses, Signals, Cycles, Biomes, and Genomes, to uncover new approaches to boost student test scores, lower stress levels, or speed comprehension. While we all have been working with general sustainability in our projects, what if we fast-forwarded sustainability to where it is headed? As we move from the Digital Age to the Biological Age, the line between the natural and the manmade will start to disappear. In this talk, we'll explore how to embrace biology as the ultimate technology to develop a new approach to sustainable design that triggers specific physiological responses in students and staff using human systems, human senses, circadian rhythm, neurotransmitters, and microbiomes to transform how we provide care and learning.

San Diego International Airport New T1: Sustainability Triple Crown

Chad Reese (San Diego International Airport), Kristen Salinas (NORESO),
Brittany Waddell (ARRIVE Aviation Alliance)

Great Room IV



GBCI #
920026756

The New Terminal 1 Project has integrated sustainability throughout the design, construction, and operations phases. The project is tracking to achieve sustainability awards across ParkSmart, Envision, and LEED. This session will focus on the pillars of Water Reuse and Decarbonization initiatives, describing the project elements of each and their evolution from design through operations. Our panelists will discuss how Sustainability frameworks have been leveraged to inform decision making on this landmark project, from design-construction-operation. This presentation will also include discussion on how these strategies could be replicated on other projects.

Great Rooms I-111

Palette Panel: Imprinting Culture Through Local Artists Perspective and Honoring Legacy Communities in Affordable Housing Developments

Victor Ochoa (California Arts Council), Paola Villaseñor (PANCA), Robert Ito (Ito Girard and Associates),
Elizabeth Carmichael (ECOhouse Architecture)

Shutters West



GBCI #
920026753

Local art connects neighborhoods and residents as artists interpret the history of the area and society through a unique lens. This session will allow you to experience their passion and learn more about their approach with an art palette panel: renowned muralist Victor Ochoa and 2021 San Diego Art Prize Recipient Panca, Paola Villaseñor, gaining a deeper understanding of our community. Learn how incorporating cultural context through artists' color and texture choices stimulates human connection and well-being. Rounding out the panel is seasoned developer Robert Ito, who's commitment to housing equity and strategies for revitalization without gentrification has proven successful to retaining existing citizens and strengthening community.

EXHIBITORS



Perkins&Will



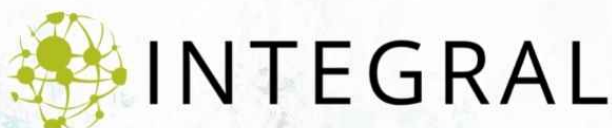
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