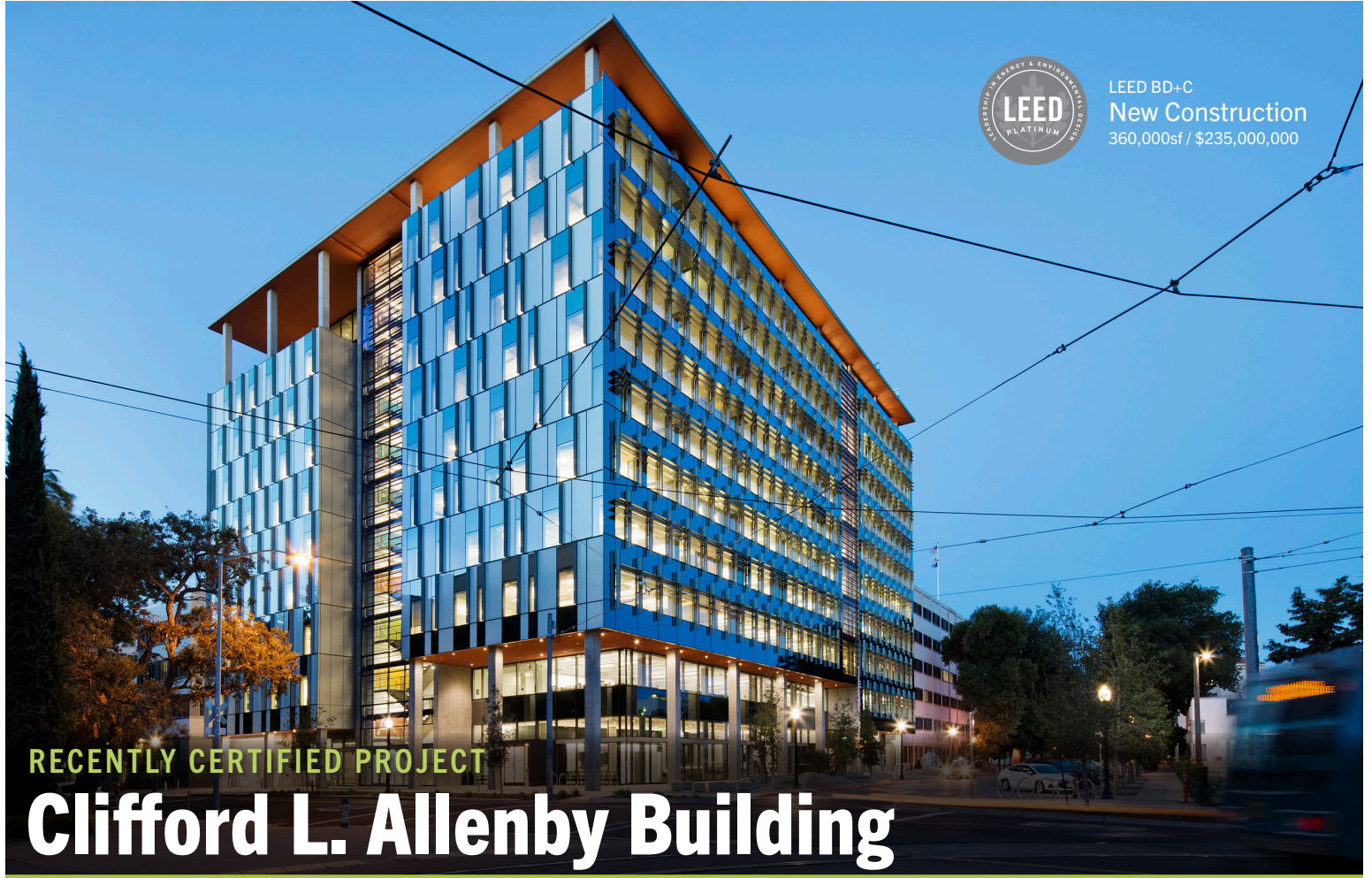




# GREEN SHEET

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RECENTLY CERTIFIED PROJECT

## Clifford L. Allenby Building

The newly completed Clifford L. Allenby Building (formerly known as the “O Street” project) in Sacramento, CA is another terrific example of leading-edge sustainable design in our built environment.

Working for the Department of General Services (“DGS”), the Rudolph and Sletten team recently finished this future-ready building that **will achieve net-zero energy, carbon neutrality and LEED Platinum certification.**

Net-zero energy means that the total amount of energy used by the building on an annual basis is equal to or less than the amount of renewable energy created on-site or off-site. This project will produce as much renewable energy as it consumes by contracting for a dedicated PV array through SMUD’s SolarShares program and has an extremely efficient energy use rate of 24.8 kBtu/sqft/yr that places the building in the top 1% of office buildings in the US and 48% below the ASHRAE 90.1-2010 energy code. Other energy efficient features include high-efficiency water-to-water heat pumps for base heating and cooling loads, external solar shades, high-efficiency mechanical systems, 100% LED lighting and exhaustive

“default off” lighting controls that result in 0.3W/sqft (roughly 60% less energy than current Title 24 requirements).

Typical existing buildings similar in nature to this new building will have an energy use intensity (EUI) of around 100. California’s energy code requires this new building to have an EUI of 45 or lower, and this new building is recording an EUI of 24.8, almost twice as good as the code requirement. Refer to the [Winter 2021 Green Sheet](#) for more information on EUI and how it’s calculated.



The building is also designed to achieve carbon neutrality certification through [LEED Zero Carbon](#). This certification targets carbon emissions during the building's operation and requires a balance each year between total carbon emitted and total carbon avoided. Carbon emitted is measured through energy usage and transportation used by occupants in getting to and from the building. Carbon avoided includes on-site renewable energy generated and exported to the grid, off-site

renewable energy procurement, and the purchase of carbon offsets.

In addition to being carbon-smart during operation, the project team also reduced carbon emissions during construction by optimizing the structure and envelope to reduce embodied carbon by 14.7% from a typical, regional baseline. These structural optimizations included: post-tensioned concrete to reduce the depth of the concrete slabs (and the embodied carbon associated

with cement) and using large amounts of supplemental cementitious materials (SCMs) like fly ash and slag that reduced the amount of carbon-intensive cement in the concrete mix designs by 26%.

For more information on the cutting-edge work in sustainable building done on this Clifford L. Allenby Building in Sacramento, CA [click here to download](#) an 8 page write up on this topic from DGS.



# Greenbuild 2021 Recap

In his final Opening Keynote as the President and CEO of USGBC and GBCI, Mahesh Ramanujam set the tone for the 2021 Greenbuild by reflecting back on his interview with former President Barack Obama two years ago at Greenbuild 2019 in Atlanta. The former President described the hundreds of ‘Presidential Suite’ hotel rooms that he has stayed at over his two presidential terms spanning eight years. He remarked how he would often have these three- or four-bedroom suites all to himself, which provided a luxury that he felt wasn’t necessary for just one person. Mahesh emphasized this point: “How much space do we really need?”

Mahesh drew a comparison between Obama’s humble upbringing in Hawaii and his upbringing in India where he shared a single room home with his parents and siblings. Both men had similar experiences of travelling to their respective childhood neighborhoods and being struck by just how dramatically they’ve changed over the years. Not only did they not recognize them, but they weren’t even able to find their way around town!

Mahesh reminisced on when he saw the LIC Building in Chennai, India for the first time as a child; it was the tallest building in India when it was first constructed standing at 177 ft tall. He touched on how a 177 ft tall building in nearly any modern city today would be insignificant compared to modern day skyscrapers. Mahesh drove home Obama’s point: with the world changing so much so rapidly, we need to ask ourselves the question: How much is enough? How many resources do we really need to use? How much space do we really need to have for ourselves? Are we operating on the basis of possibility (what’s possible to build and consume) or practicality (what’s practical given everything we know now about the strains we’re placing on our planet)?



Touching on the ongoing climate change crisis, Mahesh explained that while it is encouraging that many large companies are making goals of achieving net-zero emissions, many do not know how to get there. What’s worse, net-zero won’t be enough. He promoted going beyond net-zero and striving for regenerative building efforts. This was a theme expressed consistently throughout Greenbuild 2021: regeneration. The idea that we not only achieve net-zero impact, but we go one step further and regenerate our world by giving back more than we take.

## Rudolph and Sletten Sustainability Development Committee (SDC)

Our mission is to further develop Rudolph and Sletten as an industry leader in sustainable construction.

### Sustainability Director:

John Home, VP Operations - Roseville

### Committee Members:

Mike Mohrman                      Christian Parker  
 Montserrat Fernandez        Pierce Salamack  
 Hugo Mailloux-Beauchemin

## SUSTAINABLE PROJECT TALLY

**56**  
 Completed Projects

15,616,119	square feet
\$5,973,251,664	

**10**  
 In Progress Projects

1,364,029	square feet
\$1,031,143,000	

## RECENTLY CERTIFIED PROJECTS



UC Davis Health  
 Patient Contact Center  
 70,000 sf / \$16,972,000



Kaiser Permanente  
 Roseville Riverside  
 Medical Office Building  
 210,000 sf / \$141,800,000

