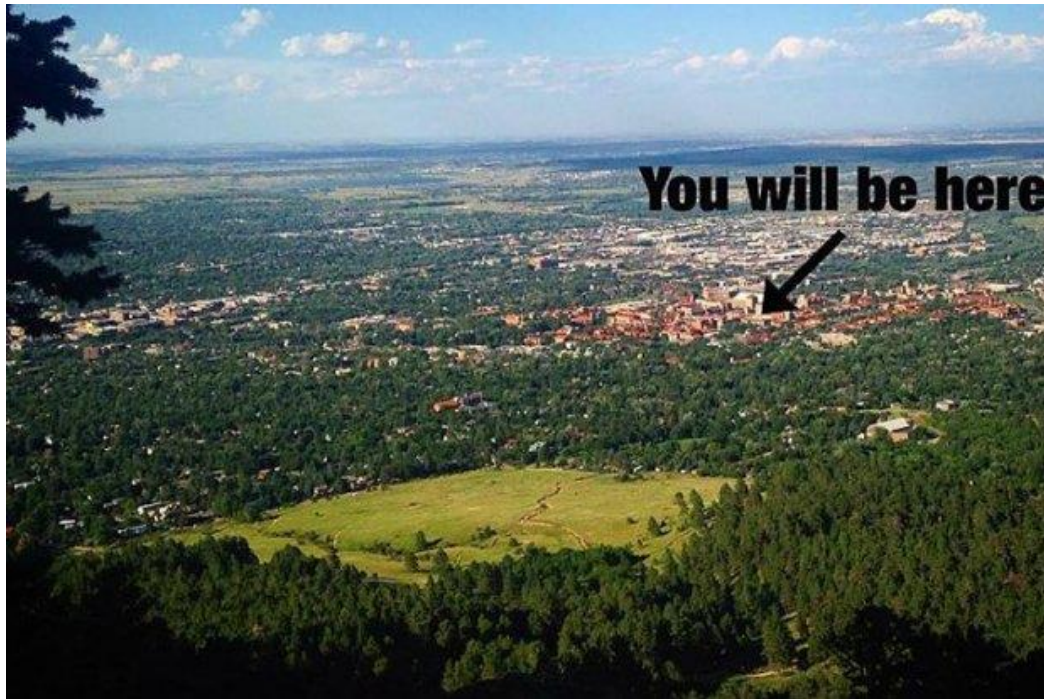




Williams Village East – New 700-bed Residence Hall



FEATURES OF WILL VILL EAST



“These features will also help encourage students to get into the habit of being energy conscious.”

- Meghan Bogener, Project Architect

- 178,000 sq ft. building will be LEED Gold
- Other features include:
 - * Solar panels
 - * LED lighting
 - * Recycling areas
 - * Occupancy sensor lighting
- Green outlets
 - * Thermostats in each room
 - * Low-flow toilets and urinals
- Door closers
- VRF HVAC System



University of Colorado **Boulder**

CHAMPIONS CENTER ATHLETIC COMPLEX

SUSTAINABILITY FEATURES AND HIGHLIGHTS

Efficiency

- Over 60% savings in potable water used for irrigation
- 45% savings in water consumption from water efficient appliances in the building

Energy and Atmosphere

- 49% energy cost savings over ASHRAE 2007 base case
- 28% of annual energy cost for the Indoor Practice Facility, Dal Ward and Champion's Center are offset by renewable site-generated energy from the solar photovoltaic system on the Indoor Practice Facility

Materials, Resources & Indoor Air Quality

- 35% of building materials contain post-consumer recycled content
- 27% of building materials are regional
- 72% of wood building materials are Forest Stewardship Council Certified Wood
- All paints, adhesives and sealants, flooring, and composite wood used on the interior of the building meet indoor air quality LEED requirements.
- 79% construction waste diverted from landfill

Transportation

- Excellent public transportation and bike path access





Transforming Energy through Discovery and Innovation

Dr. Mike McGehee

Transformative Advances in Perovskite Tandem Solar Cells and Dynamic Windows

Dr. Mike McGehee's research advances two different game-changing clean energy technologies: Optimizing perovskite tandem solar cells to achieve high efficiency power conversion with exceptional stability; and developing affordable, dynamic electrochromic windows based on reversible metal electrodeposition, which significantly improves the thermal efficiency of buildings while reducing glare.



Dr. Greg Reiker

🏆 ARPA-E Awardee

Fugitive Methane Detection Enables Mitigation

ARPA-E stimulated a Colorado-based Nobel prize-winning technology to go from a laboratory marvel to the centerpiece of a new startup company supporting natural gas production & distribution. With ARPA-E funding, a team of CU Boulder, NIST and NOAA researchers successfully developed a prototype long-range methane leak detection system capable of interrogating several square miles in just a few minutes.



Dr. Margaret Murnane

🏆 Basic Energy Science Awardee

Shedding New Light on Heat, Spin and Charge Transport in Nanosystems

New light sources developed by Dr. Murnane have expanded our understanding of heat, spin and charge transport in nanosystems, with design implications for next-generation integrated circuits, data storage, thermoelectric devices, nanoparticle-mediated thermal therapies and nanoenhanced photovoltaics for improving clean-energy technologies.



Dr. Dragan Maksimovic

🏆 EERE Awardee

A Disruptive Approach to Electric Vehicle Power Electronics

Sponsored by DOE's Vehicle Technologies Office, Dr. Maksimovic's research is developing a new modular power conversion approach that utilizes both silicon and wide band gap devices to address the fundamental power conversion, loss and component stress mechanisms.



Dr. Gregor Henze

🏆 NREL Awardee

Building-to-Grid Model Development for Advanced Sensing in the Distribution Grid

Dr. Henze's research explores methods to achieve greater system efficiencies through enhanced integration of buildings with electric grid operations. Such integration could allow buildings to actively participate in energy markets, which in turn can enable greater amounts of renewable generation by creating elasticity in the demand for electricity.



Be Boulder.



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