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JOIN US IN WELCOMING "SEVEN" NEW PLAYERS



**Victoria Herrero-Garcia, LEED Green Associate
Sustainability Design Consultant**

"Our buildings are alive: they breathe, need clothing and water, they generate waste and a relevant amount of Greenhouse Gas Emissions. I am confident that sustainable strategies can be maximized within budget to reduce their impact."

Victoria develops sustainability strategies and facilitates green building rating systems certifications for commercial and multi-family residential projects. Her expertise revolves around Greenhouse Gas Emissions reductions for buildings, educational institutions and municipalities in addition to Climate Action Plans.

**Anita Gomez
Administrative Assistant**

"Energy efficiency and zero waste has always been important to me and my family. Excited to be the glue for the team."

Anita is the Administrative Assistant for Ambient Energy. She has worked with public and private agencies and has 14 years administrative experience.





**Devika Kumar, LEED AP BD+C
Sustainability and Commissioning Specialist**

"I enjoy working hard to help implement green strategies and designs that result in high performance buildings"

Devika has 4 years of mechanical design, commissioning and LEED consulting experience. She has commissioned both MEP and building envelope systems. Having been on the design and implementation side, Devika understands how to bridge the gaps between the design and construction teams to build an energy efficient space. Devika is also passionate about waste management and sourcing building materials.

**Kevin Perri, CEM, CCP, LEED AP
Commissioning Engineer**



"Sustainability, whether planning or building towards it, is just common sense."

Kevin facilitates new and existing building commissioning, energy audits, measurement and verification (M&V), indoor air quality tests, air and waterside TAB verification, thermal imaging, building envelope/air barrier testing, tracer smoke testing, and water intrusion testing.



**Eric Ringold
Building Performance Engineer**

"I am committed to working closely with designers and developers to improve the efficiency and economy of their buildings through advanced engineering analysis. With in-depth knowledge of the current state of building energy computation and experience with all types of buildings throughout North America, I strive to provide meaningful and specific insights to decision-makers in most effective timeframe."

Eric develops energy models in order to evaluate the performance of new and existing buildings, meet local codes, third-party certification, and to overall satisfy the clients energy goals.

**Steven Wancewicz - EIT, CEM
Commissioning Engineer**



"I seek to streamline processes to make improving energy efficiency more viable and information more readily available to clients."

Steven facilitates new and existing building commissioning, and energy audits. He is also a SkySpark specialist.



**Yijia Wang, EIT, LEED Green Associate
Building Performance Engineer**



"I am passionate about using building technology to inform early design decisions and to analyze the cost-benefit of existing building retrofit. I love to use my engineering knowledge and research experience with the most suitable software to provide clients with the most robust consultation possible about their choices."

Yijia is an experienced energy modeler with an emphasis on analysis of HVAC systems as well as the MEP design.

CLIMATE CHANGE - IT'S A PLANET ISSUE: A Call to Action

By Renee Azerbegi, President and Sustainability Team Leader



On a recent visit to Alaska, the urgency of Ambient Energy's vision of building regenerative and resilient buildings was intensified through my firsthand experience of the impacts of climate change. After visiting many glaciers that are melting at a faster rate than ever before, and seeing the changing glacier levels over time (for example at Exit Glacier in the Kenai Fjords Peninsula National Park), it confirmed that our work at Ambient Energy is more important than ever. Ambient Energy staff members each enjoy a three week paid sabbatical every three years so we

have the opportunity take a step back from our day-to-day work, refresh, and keep our creative spirit alive. I like to travel the world with my family to see how our planet is doing. On my sabbatical six years ago, I visited a South American glacier in Patagonia (which was one of the 1% of glaciers not receding) but in Alaska, the extent that glaciers have receded over the course of 120 years was marked with signage and the recent rapid changes were dramatic and distressing.

A new study published in the Journal of Glaciology by thirty-nine researchers from the World Glacier Monitoring Service who compiled and analyzed data from hundreds of glaciers worldwide confirmed what I experienced visiting glaciers in Alaska. Their research indicates that the observed glaciers from 2001 to 2010 shows "a loss of half a meter and one meter...ice thickness every year- this is two to three times more than the corresponding average of the 20th century."(Alaska Dispatch News, Aug. 3, World's Glaciers Losing Ice Faster than Ever Recorded, Study Says", Asaf Shalev).

Disturbingly, at the same time, the cost of fossil fuels is lower than it has been in the past decade, with the increased exploration of coal, oil and gas throughout the country including Alaska. Ironically, melting polar ice is making it feasible to extract more fossil fuel out of the arctic. Comparing just last year to the end of July this year, the cost of crude oil is down 48%, gasoline down 30%, diesel and heating oil down 27%, natural gas down 40%, and coal down 20% (Alaska Dispatch News, Aug. 5, 2015, Fire Sale on Stuff that Burns: Oil, Natural Gas and Coal Down). While it is good news that the U.S. is becoming more energy independent for various other non-environmental reasons, the lower costs associated with abundant fossil fuel resources indicate that "peak oil" will likely not be a reality in the near future. We

are going to have to find other reasons, not necessarily financial, for people to choose efficiency and renewable energy solutions over fossil fuels. Here are a seven options for municipalities, states, and the Federal government to consider:

1. Support the Clean Power Plan released by the White House and EPA on August 3rd this year and not allow its implementation to be impaired by power politics. This plan sets flexible and achievable standards to reduce carbon dioxide emissions by 32 percent from 2005 levels by 2030 by setting state specific tailored implementation plans.
2. Adopt a carbon tax or a cap and trade system (or a hybrid of the two) for all our energy resources, to influence economic decisions on which energy resources are most attractive. Taxes on consumables such as alcohol and tobacco not only curb consumption but also provide revenue for more positive needs.
3. Phase out fossil fuel subsidies (currently estimated in 2010 to be \$700 billion to both producers and consumers of fossil fuels, or 1% of world GDP). According to the OECD and IEA, this phase out could result in a 10% reduction in global greenhouse-gas emissions in 2050 compared with a business-as-usual case. (Analysis of the scope of energy subsidies and suggestions for the G-20 Initiative, IEA, OPED, OECD, World Bank Joint Report, 16 June 2010).
4. Adopt the "Under 2 Memorandum of Understanding" - a 2 tons per capita emissions goal by 2050 adopted in May of 2015 by the States of California, Vermont, Washington, Oregon, and other provinces and cities across North and South America and Europe (Global Climate Leadership MOU). For reference, the US Average is about 17 tons per capita.
5. Adopt more aggressive building codes and standards that push buildings faster to net-zero energy. Currently the codes and standards are pushing towards net-zero energy for new buildings by 2030 and for existing buildings by 2050. We need to move the 2050 goal for existing buildings back to 2030, and move the 2030 new construction goal to 2020. The State of California for example, has done the latter for residential building code adoption already. Some large scale developments in California, such as the San Francisco International Airport, has adopted a goal to be net-zero energy for new and existing buildings by 2020.
6. Implement creative financing to make efficiency investments more attractive such as Property Assessed Clean Energy financing (PACE). PACE is a means to finance energy efficiency upgrades or renewable energy installations by offering specific bond to investors and then loan the money to consumers and business to put towards an energy retrofit. The loans are repaid over the assigned term between 5 and 25 years via an annual assessment on their property tax bill. The loan becomes attached the property rather than the individual.
7. Build a targeted social media campaign on Facebook, U-Tube, LinkedIn, and others to create a non-partisan climate change action message to call on positive near-term action.

Although most Americans now believe climate change is happening, most also believe climate change won't affect them personally. However, we are all affected by climate change already with the changing weather conditions, increased fires, severe droughts, and intensity of storms. For once, we need to act collectively, momentarily setting aside the individualistic spirit that makes us so proud to be called Americans. We need to agree to reduce our actions that intensify global climate change and not consider this "a political issue." We cannot wait for many more catastrophic events before we take action.

Climate change - it's a planet issue.



STAFF SUMMITS FIRST 14ER

After talking about doing it for a couple of years, several staff members summited our first 14,000 foot mountain as a team! At 14,265 feet above sea level, Quandary Peak is the 13th highest mountain in Colorado. Although it's known as a good 14er for inexperienced climbers, it was by no means a walk in the park. We're especially proud of three new employees (Eric, Yijia, and Kevin) who all recently moved to Denver from near sea level and made it to the top. Great job everyone!

IFMA World Workplace 2015

By Clayton Bartczak, Sustainability Consultant



It's an exciting year for facility management professionals in Colorado because the International Facility Management Association's (IFMA) annual World Workplace conference is convening at downtown Denver's Colorado Convention Center October 3-9. This year also marks the 35th year birthday of IFMA, a robust professional organization with over 24,000 members in 94 countries. IFMA's annual conference offers facility management (FM) professionals opportunities to network with their peers, share best practices, meet vendors in the expo hall, and learn new skills through the conference's educational sessions.

Ambient Energy is excited to have the opportunity to be part of World Workplace through an educational session focusing on one of our current projects, The Alliance Center. The presentation is titled Green O&M evolution: From LEED-EB & ongoing Cx and into the future with the LEED Dynamic Plaque and was developed by Jason Page (Alliance Center Director), Christopher Morales (Ambient Energy Commissioning Engineer), and Clayton Bartczak (Ambient Energy Sustainability Consultant). We will describe the Alliance for Sustainable Colorado's colorful history of sustainable operations at its historic 1908 office building in Denver's LoDo neighborhood and its evolution from a storage warehouse to a top-notch office and community space in the heart of Denver's most desirable commercial and entertainment district.

The Alliance Center has proven its commitment to sustainability through a wide variety of awards and green building certifications including USGBC's National Leadership Award for Education by an Organization, the 2015 IFMA Award of Excellence, ENERGY STAR, LEED for Commercial Interiors, LEED for Existing

Buildings (EB v2 and EB:O&M v2009), the LEED Dynamic Plaque, a comprehensive ongoing commissioning program, and several other other energy and sustainability awards. These formal certifications and processes are reinforced by the Alliance for Sustainable Colorado's day-to-day goal to provide an efficient historic building that showcases progressive sustainability strategies and makes tangible the environmental commitment of the 40 building tenants.

Please join us and be inspired by the diverse sustainability accomplishments of the Alliance Center. Hope to see you there!

Click ([here](#)) for more information on IFMA World Workplace 2015.

USGBC CO STATEMENT IN SUPPORT OF THE INDOOR USE OF GRAYWATER

For More Information Contact Shawna McGregor, shawna@rosengrouppr.com



DENVER (August 12, 2015) As Colorado's State Plumbing Board considers adopting new or additional plumbing code to accommodate the use of graywater in Colorado, the Colorado Chapter of the U.S. Green Building Council wishes to reaffirm its support for the full execution of House Bill 1044 regarding the legalization of graywater in the State of Colorado and asks industry leaders to consider the same support when adopting plumbing measures. Currently, the State Plumbing Board is proposing to allow use of graywater only for outdoor irrigation. Toilet flushing using graywater would not be allowed under the current version. In advance of the State Plumbing Board's next meeting on Tuesday, August 25, USGBC Colorado Executive Director Patti Mason released this statement:

"Graywater eases the burden on sewers and septic systems, reduces demand on water from aquifers, and lowers energy and chemicals required to treat wastewater. In Colorado alone, graywater has the potential to replace 85,000 acre feet of water each year. USGBC Colorado supports graywater reuse as it is viewed as a critical means of addressing water needs in the future."

Read the full statement ([here](#)) and get the word out!

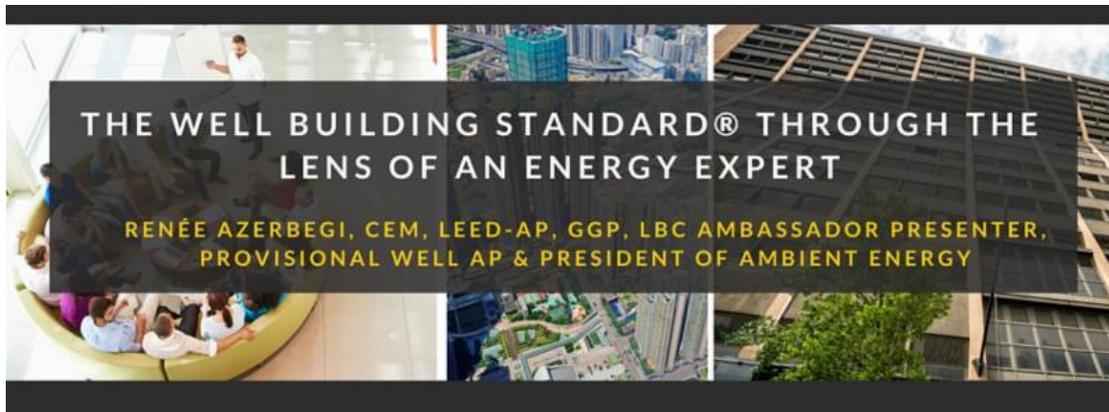
NOVEMBER 2015 - EL SALVADOR HABITAT BUILD

Are you interested in participating in an exciting international volunteer experience with other sustainability focused designers and builders?

Ambient Energy team member Clayton Bartczak is putting together a team of architects, engineers, and contractors for a Habitat for Humanity Global Village build to El Salvador November 14-22 and is looking for a few more fun-loving people to join the team, no experience necessary. Come join the fun building homes in partnership with low-income families while participating in a cultural immersion experience you will never forget! Contact Clayton for more details: clayton@ambient-e.com or 720-227-2718.

WELL BUILDING STANDARD THROUGH THE LENS OF AN ENERGY EXPERT

In the May Newsletter, Renee Azerbegi provided a brief introduction into the new WELL Building Standard or otherwise known as (WELL). In 2014, she attended the inaugural WELL kickoff and in early 2015 received her provisional accreditation at the first WELL training. As an energy consultant for over 18 years, Renee was eager to learn how WELL truly impacts energy and the environment within the commercial sector. Read more in Renee's white paper, "[The WELL Building Standard from the Lens of an Energy Expert.](#)"



PROJECT HIGHLIGHTS



San Francisco International Airport, Boarding Area B, San Francisco, CA

Under contract with Parson Brinkerhoff, Ambient Energy is providing Project Management Support Services to SFO for the Boarding Area B project. This work entails being the owners liaison between the design-build firms and the airport to confirm that the airports many sustainability requirements and policies as defined in the RFP and in CalGreen, Title

24, SFO design and construction guidelines, guiding principles and more are being carried out as it relates to energy, LEED Version 4, sustainability, and commissioning.

Golden State Warriors Blocks 29-32 Multi-Purpose Arena, San Francisco, CA

The Warriors Sports and Entertainment Center for the Golden State Warriors will be built in Mission Bay on 12 acres of private, inland property, bounded by 3rd, 16th and South Streets, and Terry Francois Blvd. The complex designed by MANICA Architecture, consists of an arena with approximately 18,000-seats, multiple office



buildings with ground-floor retail, and open spaces. The project is envisioned to include offices, conference space, retail, restaurants, structured parking, public

spaces/parks, and other amenities. Ambient Energy is contracted to assist WSP in providing Commissioning Services for the office and retail portion of the blocks.

Colorado State University Chemistry Building, Fort Collins, CO



With a focus on world-class chemistry research, the new CSU Chemistry Building is a \$36 Million, 60,000 sf facility opening on the campus in Fort Collins in 2017. It will create flexible labs with open, daylit research spaces supporting Synthetic Organic, Synthetic Inorganic, and Bio-Synthetic Chemistry. Ambient Energy is working with the Hord Coplan Macht / Ratio architecture team with energy consulting services for this project pursuing a LEED Gold rating.

EVENTS & SPEAKING ENGAGEMENTS

July 12: AGC-CO Breakfast with the Board, Denver, Colorado

Ambient Energy was a proud sponsor of the July 12th American General Contractors Breakfast with the Board. Clayton Bartczak featured the [Ambient Energy LEED Contractor Toolkit](#) to the 300+ attendees. The Toolkit is a valuable tool for contractors who are faced with the challenges of product submittals, materials tracking and written plans required of a LEED project.

Professor Keith Molenaar, with the Construction Engineering program at CU Boulder gave a compelling presentation on, "Examining the Role of Integration in the Success of Building Construction Projects." ([Download Paper](#))

September 30, IFMA Silicon Valley Chapter: Well Building Standard, San Jose, California

Renee Azerbegi to speak on the WELL Building Standard as it relates to Facility Managers

October 6-7: IFMA World Workplace: Green O&M Evolution, Denver, Colorado

Ambient Energy will present, "Green O&M Evolution: From LEED-EB & Ongoing Cx and into the future with the LEED Dynamic Plaque." Presented by: Jason Page, Director of the Alliance Center, Christopher Morales, Ambient Energy Commissioning Engineer and Clayton Bartczak, Ambient Energy Sustainability Consultant

November 3: Colorado Real Estate Journal, Commercial Interior Architecture and Design Conference: WELL Building Standard Panel, Denver, Colorado

Renee Azerbegi to speak as part of a [panel on the WELL Building Standard](#)

November 5: USGBC CO, Green School Summit Workshop: Well Building Standard Panel, Location TBD

Renee Azerbegi to speak as part of a panel on the WELL Building Standard

November 11: San Francisco Department of Environment, Green Building Task Force Meeting: An Introduction to the WELL Building Standard, San Francisco, California

Interactive education session on the WELL Building Standard. Presented by Devika Kumar, Ambient Energy Sustainability & Commissioning Specialist

November 19: AIA Colorado, Cocktails and Credits: Existing Building Commissioning, Location TBD

Ambient Energy will help educate the attendees on Existing Building Commissioning, presented by Christopher Morales, Ambient Energy Commissioning Engineer

December 1: Commercial Real-Estate Awards & USGBC Holiday Gala, Space Gallery, Denver, Colorado

WE'RE HIRING & LOOKING FOR REFERRALS

Are you ready to work where you can have real IMPACT?

Please see more details including a description of our benefits here: [Career Page](#)

Ambient Energy provides sustainability, energy, and commissioning consulting on new and existing buildings. We work with government agencies, building owners, architects and contractors. Our clients plan, design, maintain, construct and operate highly efficient and sustainable buildings. I appreciate your business and look forward to speaking with you soon.

"Celebrating 10 Years of Improving the Built World"

Sincerely,

Renee Azerbegi, President
renee@ambient-e.com

Denver | [San Francisco](#)

Ambient Energy is a women-owned small business and often qualifies as a disadvantaged business enterprise. Current certifications include:

- Federal Government: WOSB
- Women's Business Enterprise Council: WBENC
- California Unified Certification Program: DBE, WBE
- San Francisco Office of Community Investment and Infrastructure: SBE
- County of Los Angeles Community Business Enterprise Program: DBE, WBE
- State of Colorado: DBE, M/WBE, SBE

NAICS Codes: 236220, 541310, 541330, 541350, 541380, 541490, 541618, 541620, 541690, 541990, 543950, 561210, 561990, 611430

