

# CABEC's 2019 "California's New Energy Horizon" Conference, April 25 - 27, 2019

Preliminary Schedule (all Sessions are subject to change)

THURSDAY	Room 1 Res CEA	Room 2 non-Res CEA	Room 3 HERS Updates Cal Certs	Room 4 Exam
	Res CEA MC prep course	non-Res CEA MC prep course		
	Res CEA MC prep course	non-Res CEA MC prep course	Cal Certs	
	Res CEA ACM prep course	non-Res CEA ACM prep course	Cheers	
	Res CEA ACM prep course	non-Res CEA ACM prep course	The Effort of Harmonize California and RESNET HERS Ratings - Steve Baden	
				Exams 1:00-5:00

FRIDAY	Energy Code Ace Room	Room 2	Room 3
CABEC Welcome / Announcements Keynote (McAllister)			
Informal break / Networking	Informal break / Networking	Informal break / Networking	Informal break / Networking
Game changing assessments of why All Electric Homes are feasible, practical, and essential to the future of California in single family and multifamily applications. - John Grose	Pushing The Envelope, Building For Tomorrow: This course will look at lessons learned and future struggles for new construction as home performance increases, whole house systems are effected and in some cases underperforming. - Steve Buttitta	On going consultation with clients for their energy reports, working with building departments, HERS raters, Green Building certification raters, and sharing building model files. - Lynne Mitschke	
Break	Break	Break	Break
The sun shines bright on California: new solar requirements in the golden state Ritesh Nayyar (45 min)	Low-rise residential reach code packages for the 2019 Title 24 energy code - Alea German (45 min)	Multifamily Ventilation Compliance Strategies: Nonresidential - Gina Rodda and Marina Chavez-Blanco (45 min)	
Informal break / Networking	Informal break / Networking	Informal break / Networking	Informal break / Networking
How Builders Plan to Integrate Solar for Compliance - Troy Bevilacqua (45min)	CAHP billing analysis - Mike Maroney (45 min)	Where We're Headed with the 2019 Energy Standards "€" Nonresidential - Gina (45 min)	
Lunch	Lunch	Lunch	Lunch
Presentation: Equitable Net Zero - Renewable Source Energy and the All Electric Future - Bronwyn Barry	This session would focus on Accessory Dwelling Units. We will review the 4 different types of possible construction, (taking over attached unconditioned space, taking over detached unconditioned space, adding on, connected, to already conditioned space, and a brand new build) and how it will look in the 2019 code. The session will explore the challenges ADU€™s face and offer possible solutions to get a project passing. - Michelle Austin	Indoor Lighting Alterations: Rated Power Reduction Method This session addresses one way energy analysts can make code compliance attractive to clients through demonstrated cost savings and expert consulting. The power reduction method offers simplified data collection as well as reduced control requirements as opposed to the area category method, which translates to savings on total project costs. Analysts can also support their clients through advising them on incentive programs. - Arielle Usher	
Informal break / Networking	Informal break / Networking	Informal break / Networking	Informal break / Networking
Health safety and environmental assessment of beneficial electrification - Nic Dunfee	CBECC-Res Under The Hood: modeling for compliance and beyond Luke Morton	How to Prepare Plans and Specification for Energy Code Compliance - Brian Selby	
Break	Break	Break	Break
California Residential Building Electrification Market Assessment and Deployment Study - Results for new construction and existing single family and multifamily buildings. - Alea German	Code Compliance has Never Been This New: An EDR Primer Matt Christie	A case study using combined heat and power (CHP) with solar PV for a community based near-zero energy solution. Joe Shiau, PE, CEM, Senior Market Advisor, SoCalGas	
Informal break / Networking	Informal break / Networking	Informal break / Networking	Informal break / Networking
2019 Residential Modeling Updates			

SATURDAY	CABEC- The Benefits of your CABEC Membership and the value of becoming a CEA / AEA. CABEC Panel The future of the building standards and the transition to decarbonization		
Break	Break	Break	Break
CCAs and the shifting role of IOUs in the California market Susan Davison	2019 Dynamic NRCC Forms The California Energy Commission has redesigned the prescriptive nonresidential certificates of compliance to reduce the amount of pages, and automate verification of compliance. There will be 10 prescriptive/mandatory NRCC forms plus the NRCC-PRF. Session participants will review the content of the new forms and the interactive features meant to assist with compliance. - Kyra Weinkle & Sally Blair	Recent Advances in Modeling Phase Change Materials - Nick Brown	
Informal break	Informal break	Informal break	Informal break
Advanced Energy Rebuild: A Disaster Brings together unlikely partners - Nic Dunfee	The CEC offering a session on how to use the Commission's MAEDBS database for searching appliance efficiency metrics, we can offer such a focused workshop. - Bruce Helft	Co-presenters, Bob Habian and Canan D'Avela, deliver a potent and focused overview of best practices for understanding and properly calculating heavy mass walls for ZNE projects across all climate zones. Attendees will be equipped to lead their project teams with confidence and insight into one of the most overlooked tools for achieving ZNE outcomes, namely, Interior Exposed Thermal Mass. Additional topics include energy code updates, 4calculation secrets and a free book for each attendee. - Bob Habian, AIA and Canan D'Avela	
Lunch	Lunch	Lunch	Lunch
How to Spot a good Heat Pump - Matt Christie	High Performance + ZNE = All in for Affordable Housing - Timothy Kohut	Join this session to hear representatives from the CAHP Master Builder and Workforce Instructions for Standards in Efficiency programs discuss monitoring results, construction practices, and new technology applications from participating projects that adopted high performance attics and high performance walls. Participants will learn about moisture and temperature findings, construction best practices, and lessons learned. - David Peery and Nolan Stephens	
Informal break	Informal break	Informal break	Informal break
DeYoung Properties partnered with ConSol to build and study over 100 full ZNE homes in Clovis, CA. This session will share DeYoung's approach to building (almost) all-electric ZNE, market research on consumer preferences and willingness to pay for ZNE homes, and lowest-cost pathways to ZNE based on parametric modeling. We'll also share lessons learned from work with DeYoung and a leading architectural firm to design next-gen floor plans from scratch with a focus on design for energy savings. - Garth Torvestad	Combination service hot water systems for single family residential homes. The combi-system services both domestic hot water and hydronic space heating with a shared water heater, thereby reduces the architectural space requirements and builder's initial cost and improves overall energy efficiency for the home owners. It is popular in the East Coast but not yet in California. Gas Research Institute (GTI) has completed a computer modeling analysis, substantiated by several virtual and field test data in the U.S. Two new combi-system products on the market were found superior for part load efficiencies that resulted in more seasonal savings, as compared to the baseline of separate furnace space heating and condensing domestic water heaters. SoCalGas has a current work paper with some limited billing data showing a retrofit can save up to 25% natural gas use. There are no established industrial test standards for combi-systems. However, this project may offer an in-road to a new standard and energy efficiency measure. Tim Kingston, GTI Project Manager; backup Raad Bashar, PE, Senior Engineer, SoCalGas	Air Infiltration and CBECC-Res a look at ACH-50 - William Allen	
Break	Break	Break	Break
2019 non-res Modeling updates			
Informal break	Informal break	Informal break	Informal break
The Missing Link, How to bring contractors up to current code compliance - John N Craig	Waste heat recovery using horizontal and vertical drain counter-flow heat exchangers. Stephen Walmsley, Project Manager; backup Joe Shiau, PE, CEM, SoCalGas	WE KNOW ABOUT SMART HOMES, BUT WHAT ABOUT SMART PLUMBING AND CONTROLS?!! Larry K. Acker	