



# 2019 Annual Report



TRI-COUNTY REGIONAL ENERGY NETWORK SAN LUIS OBISPO • SANTA BARBARA • VENTURA

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## Executive Summary

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### About 3C-REN

The Tri-County Regional Energy Network (3C-REN) is a collaboration of the three counties, Ventura, Santa Barbara, and San Luis Obispo, in the California Central Coast Region, with a diverse service area that is geographically isolated from utility hubs and has pockets of rural and disadvantaged communities as well as large underserved Spanish-speaking populations. After several years' experience and cooperative administration of energy and sustainability programs, the tri-county local governments formed the 3C-REN, led by the County of Ventura, to better leverage resources in the design and delivery of effective programs on a regional level.

In Decision 16-08-019<sup>1</sup>, the California Public Utilities Commission (“CPUC” or “Commission”) provided guidance for Energy Efficiency (“EE”) Rolling Portfolio Business Plan (“BP”) filings and included consideration of the formation of new Regional Energy Networks (“RENs”). Since filing 3C-REN’s business plan to serve public agencies and their constituencies within Southern California Edison’s (“SCE’s”), Southern California Gas’ (“SoCalGas’s”), and Pacific Gas and Electric’s (“PG&E’s”) service territories. 3C-REN remains intent to deliver programs that meet CPUC criteria as indicated by Decision 12-11-015 in the formation and implementation of programs; filling gaps that the investor-owned utilities (“IOUs”) are not serving; developing programs for hard-to-reach markets; and piloting new approaches to programs that have the potential to scale and offer innovative avenues to energy savings.

In Decision 14-10-046 the Commission authorized funding for EE programs until 2025. In 2015 the Commission issued Decision 15-10-028 approving the mechanics for the EE rolling portfolio and outlining the business plan application process. On January 23, 2017 3C-REN filed a motion for approval of its rolling portfolio business plan and budget proposal. Decisions 15-10-028 and 18-05-041 provided the requirements of the Annual Budget Advice Letter (“ABAL”) and directed Program Administrators to file ABALs. In Decision 19-05-019 the Commission directed the ABALs going forward to include the results of the Program Administrator Cost (PAC) and the Ratepayer Impact Measure (RIM) test and cost-effectiveness estimates.

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<sup>1</sup> See D.16-08-019 page 10.

For households, 3C-REN offers low-cost and easy-to-install energy saving opportunities, with an emphasis on underserved communities. For industry, 3C-REN offers capacity-building services including workforce training and technical code support. Serving both public and private sector professionals, 3C-REN responds to the needs of the local building industry. Together, 3C-REN programs support energy-efficient, resilient, and healthy buildings throughout the tri-county region. These efforts help reduce energy use, strengthen local job markets, and support climate goals.



### Home Energy Savings Summary (Residential Direct Install)

The Home Energy Savings (HES) program provides free and reduced-cost home energy efficiency upgrades and services to residents throughout San Luis Obispo, Santa Barbara, and Ventura Counties.

In 2019, progress was made on program design including finalizing the list of energy efficiency measures to offer, and the incentive structure for those measures. Project tracking infrastructure was designed and developed, and a program implementer was selected.

The program is expected to launch in 2020, with the launch date for in-person services contingent on guidance related to COVID-19 and will initially focus on San Luis Obispo and northern Santa Barbara Counties before a full launch into the rest of the Tri-County region mid-year. The early launch will be used to hone in on the most effective messaging and outreach strategies for our target audience. In addition, due to the delay in launch for in-person services due to COVID-19, HES will launch a virtual version of the program across all three counties. Participants will receive virtual home assessments and self-install packages to maintain interest in the program, provide participants an opportunity to save energy and money in this period, and to raise awareness of the program in the communities HES intends to target and serve.



HES targets hard-to-reach homeowners and renters in the Tri-County Region



## Building Performance Training Summary (WE&T)

The Building Performance Training (BPT) program is geared towards current and prospective building professionals—providing expert instruction, technical trainings, soft skills development and certifications on the latest energy efficiency methods and measures.

In 2019, the program marked two key accomplishments: completion of program design and launch of the program. From April through December, 18 events were held across the region, reaching hundreds of attendees.

Strong participation numbers in 2019 reinforced a demand for local training. Looking ahead to 2020, 3C-REN will broaden the types of industries engaged in the program through targeted outreach and new course offerings. Increased outreach in Santa Barbara and Ventura Counties will also be a priority.



## Energy Code Connect Summary (C&S)

The Energy Code Connect (ECC) program offers regional services, resources, and trainings for public and private-sector building professionals. Currently ECC provides three core services: Energy Codes Coach, regional forums, and training events.

In 2019, ECC completed program design, launched forum and training events, and initiated a pilot for the Energy Codes Coach service. ECC held its first regional forum in August, held its first two training events in November, and completed the Codes Coach pilot in December in preparation for full launch.

In 2020, the ECC team looks forward to expanding training events that will support transition to the new code cycle, holding forums in new locations across the region to engage participants in hard to reach areas, and full launch of the Energy Codes Coach service to the public. As with BPT, increased outreach in Ventura and Santa Barbara Counties is planned.

For any questions regarding 3C-REN feel free to contact Alejandra Téllez at 805-654-3835 or at [alejandra.tellez@ventura.org](mailto:alejandra.tellez@ventura.org)



3CREN & In Balance training in Santa Barbara County | 2019



Obispo County | 2019

# 2019 Energy Efficiency Programs Overview

## BUILDING PERFORMANCE TRAINING

### *Program Description*

#### **Program Need**

The tri-county region lacks “high performance buildings” (HPBs)—energy efficient and resilient buildings that reduce energy use, lower emissions and address climate change. Unfortunately, consumer demand for HPBs is not increasing at the rate required to meet state energy and climate goals. Without consumer demand or policy mandates, industry must be pushed to develop the skills required for HPBs. The majority of our workforce is not sufficiently trained to understand and communicate the value of HPBs, which could drive greater consumer demand. Many workers also lack the knowledge and skills to properly design and build HPBs and do so affordably. Furthermore, the relative geographic isolation of our region has historically made access to training a challenge.

#### **Program Detail**

##### *WHAT*

Building Performance Training (BPT) delivers technical and soft skill trainings and certifications focused on high performance buildings. Example learning targets include: technical skills for the application of Title 24 - Part 6, net zero energy design and construction principles, fire hardening and resilient building materials, valuation of

#### **Program Solution**

3C-REN's Workforce Education & Training program, *Building Performance Training* (BPT), addresses these challenges by establishing a thriving and local workforce that possess the knowledge and skills to design, build, retrofit and sell HPBs. The program does this by delivering local training events that enable our workforce to develop the skills essential for creating and communicating about HPBs. Clear career pathways presented by the program enable people of all backgrounds to join the industry.

energy efficient homes, introduction to the Passive House certification, and business development skills to market energy efficient homes.

##### *WHO*

The program targets local public and private building professionals needing more in-depth training, such as contractors, HVAC technicians, engineers, architects,

designers, certified energy managers, local jurisdictions' building & safety department staff, lighting professionals, real estate professionals, and more. Programming is offered to professionals in disadvantaged communities (DACs) and hard to reach (HTR) areas, as well as individuals interested in joining the energy efficiency workforce.

BPT partners with educational institutions like community colleges as well as seasoned industry experts to deliver training events and customize course content. The program leverages relationships with industry conveners such as architectural and contractor associations to ensure broad engagement. Trainings are delivered locally in each county to address the unique challenges of the Tri-County region where geographic isolation limits proximity to career advancement opportunities.

## HOW

Events are typically held in-person, offering hands-on learning to remote communities across the tri-county region. Smaller training events may have 5 – 10 attendees, which allows students to engage with instructors to ask questions and discuss application of course content to real-world projects. Larger training events may have 40+ students, allowing instructors to deliver the latest industry knowledge and practices to attendees. Participants are surveyed after each event and feedback is used to improve upon future events.

## *Program Performance and Major Accomplishments*

### **Program Design**

The initial half of 2019 was dedicated to designing the BPT program, in close coordination with the ECC team to design complementary programs. To design programs that serve local needs, 3C-REN staff engaged our local stakeholder network to understand their priorities and challenges. In addition to meetings and phone calls with these stakeholders, 3C-REN and partner Frontier Energy also completed a comprehensive survey of building industry professions in the tri-county region. Together, input from stakeholder conversations and the market needs assessment formed the basis of program design for BPT. This design considered factors such as: which training topics are needed most, in what format should training be delivered, how often, in which locations, by whom, and expected outcomes of increased access to workforce development resources.

### *Stakeholder Engagement*

The BPT team fostered existing connections our counties have with organizations dedicated to economic development, education, labor, building and safety, planning, and community development. BPT took immediate steps to build and reinforce relationships through one-on-one meetings, calls and attendance at stakeholder events. BPT also sought collaboration opportunities with established training providers such as Passive House, Building Performance Institute, as well as building officials and industry experts that may offer ad hoc training and counsel to private sector stakeholders in the region. The extent of our stakeholder network is demonstrated by a robust contact list with over 700 building industry professionals and associated organizations tracked and maintained through software platforms.

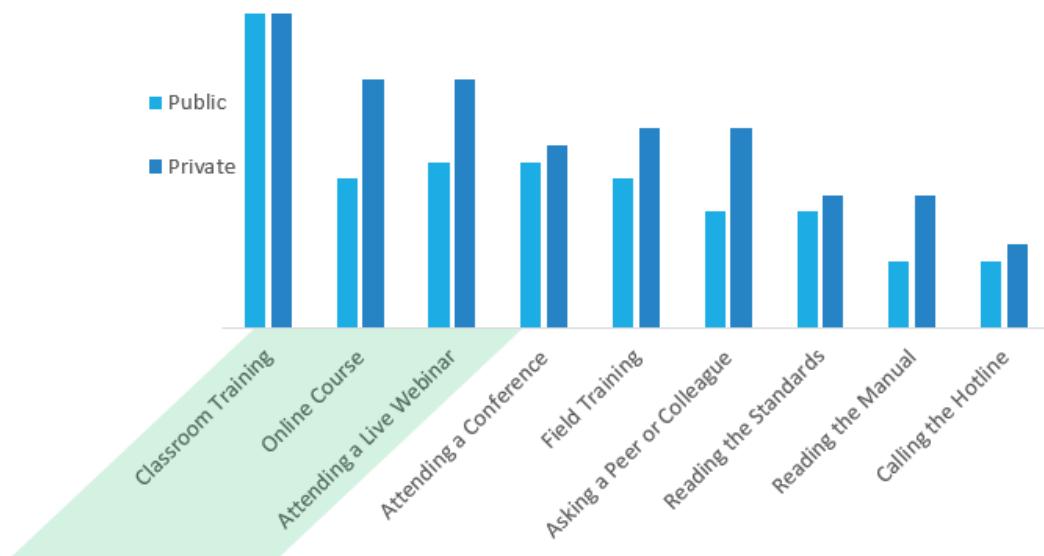
### *Market Needs Assessment*

3C-REN created a Market Needs Assessment report designed to inform 3C-REN program development for both BPT and ECC. These programs are distinct, but both are designed for building professionals, including private-sector commercial and residential building professionals, public-sector local government staff, and other building industry stakeholders that impact energy efficiency measure uptake. The report captured local feedback from these targeted stakeholders and aided in the development of each program's scope.

The report is based on feedback collected during a survey fielded to building professional stakeholders in early 2019. 3C-REN worked with Frontier Energy to develop an online Market Needs Assessment Survey for public and private sector building professionals in the tri-county region. 3C-REN staff also conducted a “roadshow” to promote survey participation and gather further qualitative feedback. The survey collected information needed to identify existing practices and baselines, characterize barriers, establish best practices, and determine training and resource needs.

One important key take away from the report is that our stakeholders find in-person trainings to be most effective, followed by online courses and live webinars. Given this, 3C-REN designed the program to focus primarily on in-person events initially, with plans to expand into online events in 2020.

*The top three most effective ways to learn new aspects of the energy code include classroom trainings, online courses, and attending live webinars.*



### *Program Documents and Database*

Findings from stakeholders and the report fed into key program documents, including a program strategic plan and action plan. Process documents were also established to guide processes such as: procurement of training providers, event planning logistics, outreach and communications, event implementation, post-event follow-up, and reporting processes. These documents, along with the 3C-REN business plan and program implementation plans created structure for staff to implement the program.

Complementary to process documents, development of a Salesforce database to track 3C-REN data began in 2019. Working with a Salesforce consultant, the team identified an architecture for the database and began build out of the system. Reporting requirements related to metrics and additional data points useful to 3C-REN guided design of the Salesforce platform.

Applicable to all 3C-REN programs, Salesforce will house data for BPT, ECC and HES. For BPT and ECC, the database was designed to provide quick and easy access to event information such as training partners, topic areas, and event attendees.

### *Procurement*

A key accomplishment in 2019 was the procurement of instructional training providers. A total of five providers were procured in 2019, bringing a diversity of workforce development voices into the tri-county region. Providers were vetted to assess the relevance and quality of curriculum offered, the ability to customize curriculum based on local needs, ability to provide in-person training events within the tri-county region, teaching format and materials, cost of services, and other important factors. Contracted trainers cover a range of topics including:

passive house principles, zero net energy design and construction, residential and commercial efficient lighting, quality insulation installation, and Title 24.

Clear and consistent procurement processes established in 2019 will enable smooth procurement and onboarding of future instructors as 3C-REN expands its pool of qualified instructors. Nimble procurement is essential as industry needs evolve and 3C-REN fills gaps in available workforce training.

### *Marketing & Outreach*

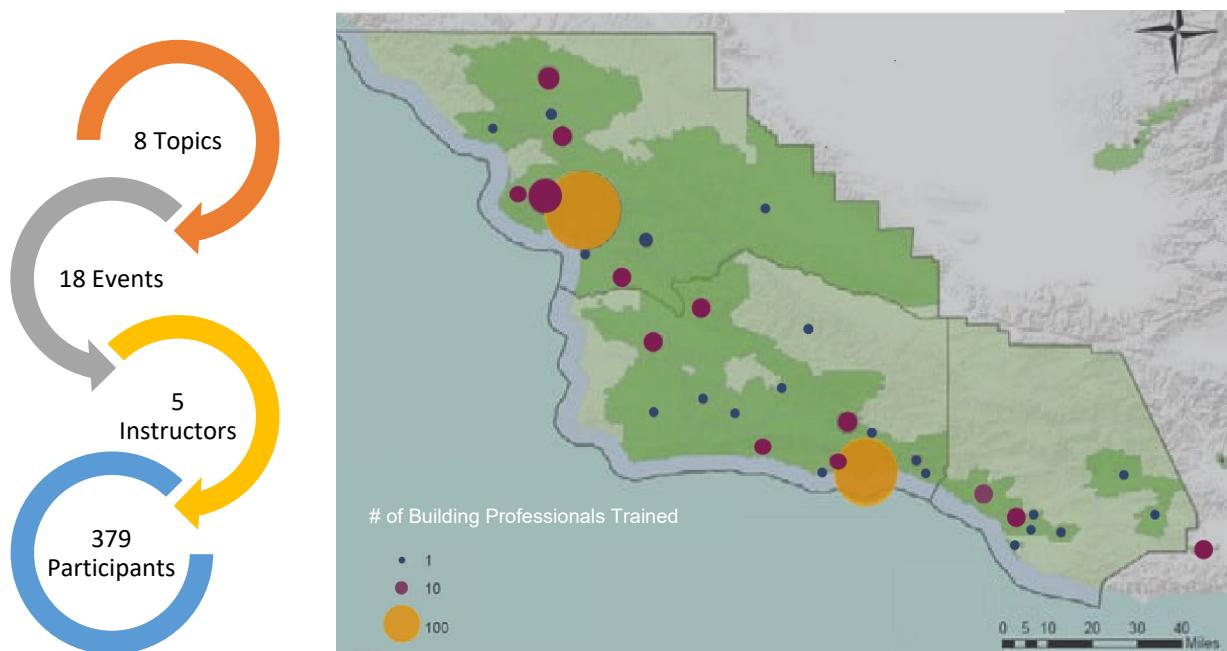
Another large focus for 2019 was aggregating and building out 3C-REN's contact lists. Once instructors were procured and events scheduled, it was important to conduct early and consistent outreach to drive event registration. Name recognition of 3C-REN counties, staff, and partner organizations supported strong participation and demonstration of demand for local training events. As mentioned, 700+ contacts from across the public, private and non-profit sectors were compiled into a single online platform.

To support outreach to distribution lists, 3C-REN began development of a brand identity, logos, website, and e-blast and event flyer templates. Routine e-blasts along with personal calls and emails are the primary outreach mechanism to drive program participation, but outreach to key partners such as the architectural and contractor associations is another important source of support. These organizations push event notifications to their members on behalf of 3C-REN.

### **Program Implementation**

#### *Event Achievements*

The program launched mid-2019 with the first events held in June of 2019, and quickly ramped up through the end of the year. A total of 18 events were held under the BPT program reaching hundreds of attendees across the region:



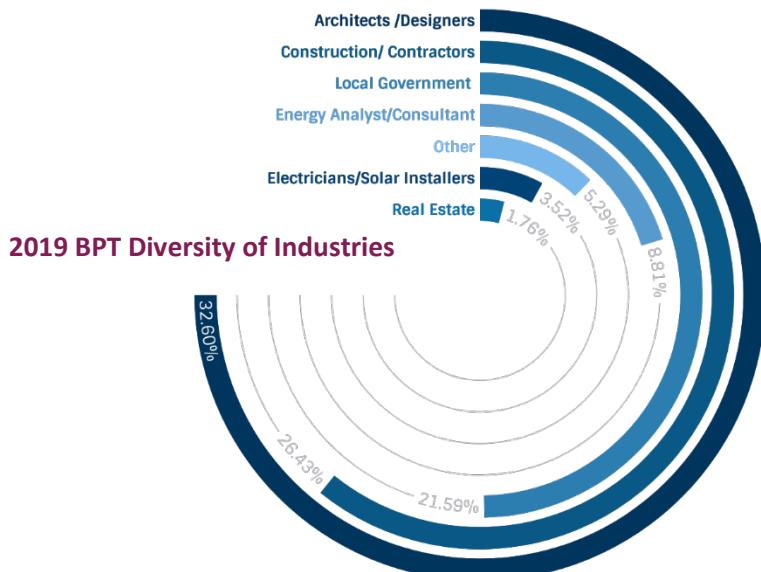
## 2019 BPT Course Topics

- 1 Residential ZNE for Title 24 2019
- 2 All Electric ZNE – Heat Pumps and Electric Appliances for Residential and Small
- 3 Residential Retrofits – 2019 Title 24 and Best Practices For High Performance
- 4 New Residential Envelope and Renewable Energy for Title 24 2019
- 5 2016 Title 24 Part 6 Essentials: Residential Standards
- 6 2019 Nonresidential Building Energy Code for Lighting
- 7 Introduction to Passive House
- 8 Quality Insulation Installation

Events were held in partnership with training providers, industry associations, non-profit organizations, building supply houses, educational institutions and more. Partners supported 3C-REN's delivery of these courses in several ways: as trainers, venue hosts, advising in the development of a course calendar, and as marketing partners. The following is a list of partners engaged in 2019:

2019 BPT Partner Organization	
1	AIA California Central Coast
2	AIA Santa Barbara
3	AIA Ventura County
4	Allen Construction
5	BMC Building Supply
6	CalCERTS, Inc.
7	County of San Luis Obispo
8	County of Santa Barbara
9	County of Ventura
10	Energy Code Ace
11	Frontier Energy
12	In Balance Green Consulting
13	North American Passive House Network (NAPHN)
14	Pacific Gas and Electric Corporation (PG&E)
15	SLO Climate Coalition
16	SoCal REN
17	Ten Over Studio
18	USGBC Central Coast Green Building Council (C4)
19	Ventura County Contractors Association (VCCA)

3C-REN was surprised and pleased with the high attendance numbers in our first year of the program. A total of 379 attendees participated in BPT events, which launched in the spring of 2019. A diversity of industries was represented from 109 organizations.



Geographic diversity is a critical feature of the program so training topics were offered multiple times to accommodate attendees in each county. Diversity in industries represented was also a consideration, with some events more geared towards the architectural community, while others were more targeted to construction trades or public sector employees. Partnership

models with large employers and membership organizations proved successful. These events offered consistently high turnout in terms of attendee participation. An added benefit to these collaborations is re-engagement, offering a series of training modules so that attendees can engage in deep learning on related topics.

### *2019 Highlights*

A major highlight of 2019 was establishing the foundational relationships that will create continued program success. Several instructional providers were brought onboard who will continue to partner with 3C-REN in future program years to deliver critical training to the region. Event venues were vetted for ongoing use. Marketing and outreach partners with key organizations, such as the architectural and contractor associations were established so that these organizations understand the 3C-REN mission and how 3C-REN's work can support their own. With these tools, 3C-REN will become even more efficient in the delivery of quality workforce training.

Feedback from first year program participants was collected to improve 3C-REN's understanding of what students find most beneficial, and what can be improved. Positive

attendee feedback and return customers were great validation that the BPT program is useful, content is applicable in the real world, and events are geographically accessible for residents of the tri-county region.

Below are a few quotes that illustrate participant satisfaction in response to the question, “What did you like most about the training?”

“Topics discussed (addition vs. alteration, water heaters, wall extensions) directly apply to projects I’m working on now.”

“Actual field solutions and technology.”

“Local, questions answered.”

“I like that it was free, local, great trainers and information, easy access to all. Food is always a plus.”

### *Opportunities in 2020 and Beyond*

Building off the success of the program’s first year, BPT staff will leverage processes and best practices established in 2019 for the second program year. Ongoing stakeholder engagement and fostering of key relationships will continue to be an important component of program development. Training needs evolve as the industry changes, so regular communication with working professionals and educational institutions is essential.

Relationships from 2019 will be nurtured while further expanding the network with new relationships in private sector. Core sectors of architecture and construction will remain a focus, but emphasis will be given to realtors and Home Energy Score training. Soft skills training is lined up for 2020 and the team will be increased coordination with the statewide WE&T team, starting with review of updated course offerings.

Beyond relationship development, marketing will be a priority in 2020. Development of a 3C-REN brand identity and template began in 2019 and will be applied in 2020 through a coordinated marketing strategy for all three 3C-REN programs. Strategies will include digital campaigns, web tools, and printed materials. Closer coordination between 3C-REN staff and instructor providers in 2020 will reinforce the 3C-REN brand.

Both above focus areas—stakeholder engagement and marketing—will support a broader 2019 goal to increase program participation in Ventura and Santa Barbara Counties. Over time and with increased data to analyze, 3C-REN staff observed higher participation in BPT and ECC events in San Luis Obispo County than the others. In 2020, the team will be digging into the reasons behind this discrepancy and developing a plan to address it.

Finally, research will begin on how to achieve longer term program goals related to serving English as a Second Language workers, offering apprenticeship-style learning opportunities, and establishing career pathways in partnership with local educational institutions.

With a broad base of workers equipped with the skills and knowledge to apply both established and advanced energy efficiency technologies, building professionals will increase efficiency and reduce emissions within the built environment, while improving their resilience and health outcomes.

In response to the Covid-19 pandemic, BPT program activity will be transitioned online until it is safe to resume in-person activities.

## ENERGY CODE CONNECT

### *Program Description*

#### Program Need

The Energy Code included in the California Code of Regulations (Title 24, Part 6) is designed to support energy efficiency that reduces the wasteful and uneconomic use of energy while improving both indoor and outdoor environmental health. To address climate change, reducing or eliminating emissions from buildings is essential. Strong energy codes can lower energy use and associated emissions, but only with strong compliance.

Compliance is difficult for several reasons:

**Low & Inconsistent Comprehension:** Codes are complex; it's hard to keep up with updates every 3 years

**Real & Perceived Costs:** The value proposition of efficient buildings is different and poorly understood

**Lackluster Enforcement:** Competing priorities and limited resources mean codes often go unenforced

**Limited Training:** Code training doesn't always reach our region or get customized to meet our needs

#### Program Solution

Energy Code Connect's (ECC's) suite of services aim to establish the tri-county region as a leader in California Energy Code and Green Building Standards compliance and enforcement. Through educational events and technical support, professionals in both the public and private sectors are equipped with the knowledge and training to increase comprehension, compliance, and enforcement of California's energy and green building codes (Title 24 Part 6 and Part 11 respectively). In 2019, ECC focused on three key services: Energy Codes Coach, regional forums, and training event.

#### Program Detail

##### *WHAT*

ECC services offer a comprehensive suite of services to simplify the energy code:

**Energy Codes Coach:** Codes coaches help building professionals navigate California's ever-changing and complex Energy Code. Experts provide prompt and personalized support online, over the phone, over the

counter, or in the field. Coaches provide access to existing and new compliance and enforcement resources and tools for local building professionals.

**Regional Forums:** Focused on energy and green building codes, forums convene professionals from both sides of the building counter. Events are educational,

with subject matter experts speaking to the latest developments in the state's energy efficiency landscape, but also interactive, fostering shared understanding as the industry works towards common goals.

**Training:** Educational events increase overall comprehension, compliance, and enforcement of codes and standards. Course content is curated to address knowledge deficits identified by regional stakeholders, and curriculum is refreshed to reflect the most up-to-date information on California's energy codes and green building standards.

#### WHO

A hallmark of the ECC program is its focus on both public and private sector professionals—supporting enforcement on one side, compliance on the other, and overall comprehension across the board. The ECC and BPT programs share target stakeholders, so program coordination is essential to reach these shared target audiences. While ECC caters to the public sector more than BPT, targeting ECC services to the private sector is equally important as connecting with public sector code officials.

Given the array of professions that touch the energy code in the design and construction of new and existing buildings, ECC offers services to architects, engineers, electricians, plumbers, plans examiners, inspectors, building officials and more. Ideal participation in the ECC program involves use of the Energy Codes Coach service in

addition to attendance at training events and forums.

#### HOW

The Energy Codes Coach is implemented by Franklin Energy (formerly Build it Green), with onsite support from In Balance Green Consulting. Requests for support from the Energy Codes Coach are submitted through an online form or by calling the Energy Codes Coach hotline. Franklin Energy staff respond to requests as soon as possible, but no later than one business day upon receipt. Depending on the nature of the request, codes coaches will answer by phone, email or offer in-person support at the counter or in the field.

Regional forums are half-day events that rotate among the three counties but seek representation from a diversity of panelists and attendees to draw participation from across the territory. Using keynotes, panelists and breakout discussions, participants learn and share best practices from across the region. Topics may range from code updates to balancing affordability and sustainability to tactics for conveying the value of energy codes to customers. Attendees leave with enhanced knowledge and new connections to peers both the public and private sectors.

Energy Code Connect training events follow the same processes as BPT events and are therefore not discussed again here.

## *Program Performance and Major Accomplishments*

### **Program Design**

Working jointly with the BPT team, the ECC team dedicated the first half of 2019 to design of the training and forum elements of the program as well as developing relationships with various stakeholders across the territory. The latter half of the year focused on design and development of the Energy Codes Coach service. Gathering stakeholder feedback from a range of voices laid the foundation for program design. For ECC, special effort was paid to key stakeholders focused on the energy code, including the California Energy Commission (CEC), Energy Code Ace (ECA), and many others. In addition to targeted stakeholder conversations, as with BPT, the Market Needs Assessment was also heavily relied upon to inform ECC program design.

### *Stakeholder Engagement*

As mentioned, in mid-2019, 3C-REN staff conducted a series of introductory meetings with Building and Safety Departments from all 28 jurisdictions across the tri-county region. During the meetings with local Building Officials and their staff, 3C-REN provided a preview of soon-to-be-launched programs and services, including ECC. These meetings turned into meet and greet series that served as important first step in establishing relationships, getting buy-in, and offering stakeholders the opportunity to provide first impression feedback. Finally, 3C-REN made the request that attendees participate in 3C-REN's Market Needs Assessment. Input obtained through these meetings, as well as the Market Needs Assessment, informed all services under the Energy Code Connect umbrella from the codes coach to training.

During this time, ECC staff also cultivated professional relationships with the private sector building industry to understand their needs. 3C-REN built a valuable and robust list of private sector contacts in San Luis Obispo, Santa Barbara, and Ventura Counties. Contacts included industry groups such as Architecture Institute of America (AIA) and International Code Council (ICC) chapters and contractor associations, construction companies and independent contractors, energy consultants, architects and designers, and others. 3C-REN focused outreach to various private sector entities over the course of the year to introduce the organization and gather valuable feedback.

Similar to the public sector meet and greet series, private sector outreach focused on increasing awareness and understanding of private sector operations and the challenges to applying energy code best practices. Outreach occurred through extensive research, growing contact lists, direct phone calls and emails, attending and speaking at events, distributing collateral to local supply houses, and initiating training opportunities around the 2019 Building Codes Cycle. Private sector stakeholders were also encouraged to contribute to the Market Needs Assessment.

### *Relationship Development with the California Energy Commission*

In 2019, the Energy Code Connect Program ramped up delivery of services to building industry professionals in the tri-county region. Key to this effort was beginning regular coordination and collaboration with the CEC, including calendaring monthly meetings with the Standards Implementation Unit. These conversations helped 3C-REN and the CEC identify opportunities of interest, maximize coordination to avoid the duplication of efforts, effectively utilize existing resources, identify service gaps and value-add opportunities, and leverage respective industry roles and expertise to improve program services.

Coordination calls led to the sharing of resources relevant to ECC offerings, such as the CEC training calendars and code compliance tools, and improved information to inform 3C-REN decision-making. For example, 3C-REN became more familiar with how the CEC Hotline is utilized by industry professionals and applied these learnings to the Energy Codes Coach service while also developing new features tailored to the region's needs.

Coordination between 3C-REN and statewide partners is necessary to continue delivering services that effectively serve the needs building professionals in the tri-county region while improving access to resources that enhance knowledge and compliance with Title 24, Parts 6 and 11.

### *Relationship Development with the Statewide Codes and Standards Team and Energy Code Ace*

As a major player in statewide codes and standards training, Energy Code Ace (ECA) was an obvious partner for 3C-REN. This partnership is mutually beneficial, expanding the range of customers ECA serves and bringing ECA Title 24, Part 6 and Part 11 training resources to underserved building professionals in the tri-county region. 3C-REN reviewed available trainings and offerings, highlighting options that focused on the upcoming changes in the 2019 Energy Code as priorities for the region's building professionals.

Coordination with the Statewide Codes and Standards Team and Energy Code Ace ensured that trainings brought to the region reflected the local landscape such as the climate zones found in the tri-county region, building stock emblematic of the region, and reach codes adopted by local jurisdictions. 3C-REN worked with ECA trainers to prepare them for regionally specific questions and nuances.

### *Market Needs Assessment*

Informing both the ECC and BPT programs, the Market Needs Assessment was a critical feedback mechanism to understand challenges, gaps, and opportunities for the local building industry and professionals. This feedback was key to informing 3C-REN's roadmap of action for the next few years. The building department meet and greets kicked off 3C-REN's continuous efforts to engage building departments as partners to increase energy code comprehension, compliance, and enforcement.

Outreach to all Energy Code Connect customers and stakeholders continues to be an even greater priority moving into 2020. Building working relationships with key partners and collecting market feedback will help the Energy Code Connect Program and 3C-REN make ongoing adjustments to best fill gaps in the unique Central Coast market.

#### *Program Documents and Database*

For efficiency, processes related to training events were developed collaboratively between the ECC and BPT teams. Key program design documents such as program strategic plans and event checklists followed the same template format for both ECC and BPT. The process documents mentioned in the BPT section of this report apply to ECC as well and are similarly used to guide the team's implementation of the program. While BPT is wholly focused on workforce development trainings, ECC's other services that includes regional forums and the Energy Codes Coach meant that additional program documents were required. Forum planning documents were created, as well as Salesforce infrastructure for the tracking of forum attendees as well as Energy Codes Coach data.

#### *Procurement*

For the Energy Codes Coach, a competitive solicitation for services was required, given the size of the contract. Contracted through the County of Ventura, Franklin Energy was brought on to implement the coaching service, given their vast experience with the energy codes.

For ECC trainings, 3C-REN again leveraged joint efforts between ECC and BPT and followed the same procurement processes for both programs. Some training partners, such as ECA, did not require procurement. For forums, procurement needs are minimal, but the team established clear division of responsibilities among the three counties.

Lastly, 3C-REN engaged Frontier Energy and Bluepoint Planning's services to support the planning, promotion, and execution of regional forums.

#### *Marketing and Outreach*

Marketing and outreach efforts detailed under the BPT section of this report apply equally to ECC. However, additional resources were developed to support the Energy Codes Coach and forums. To facilitate ease of use, a simple web form was designed to collect Energy Codes Coach inquiries. The form is integrated into Salesforce and will be synced to the new 3C-REN website. For forums, the team began coordination with the marketing consultant to design a PowerPoint template for forum presentations, as well as general 3C-REN presentation needs.

## **Program Implementation**

### ***Energy Codes Coach***

Following procurement of Energy Codes Coach partners and program design, the first step towards implementation was soft launch of the service. The soft launch was initiated to refine the process of the service offering and obtain user feedback for improvements prior to full release.

3C-REN and Franklin Energy recruited both public and private sector building professionals to participate in the soft launch. Selected partners were chosen for their willingness to use the system and provide candid feedback on what worked well and what needs improvement.

The soft launch was conducted from November 5<sup>th</sup> through December 6<sup>th</sup> of 2019. Participants were notified the service was open and given instructions on how to use the web form and hotline. 3C-REN encouraged trial of the service in its various forms—over the phone, by email, and in-person via onsite or in office visits—as well as encouraged to utilize the service more than once during the soft launch window.

To fulfill the intent of the soft launch, direct and abundant participant feedback was essential. Two touch points were established to collect feedback:

- After the first touch (call or online request) with the service, participants received a call from a Franklin Energy codes coach to ask a few key questions about the service and their experience;
- A short online survey was conducted once the soft launch window closed to provide final feedback, and the ability to do so anonymously.

Soft launch feedback allowed the team to iterate on the service, making improvements prior to full launch in 2020. A total of 13 inquiries from four organizations were received during the soft launch from public and private sector participants. Most inquiries were related to residential projects; two inquiries were regarding commercial projects. The vast majority of inquiries came during the design and development phase of the projects, with only one inquiry during the construction phase. Projects were split evenly between new construction and major renovations/additions. Inquiry topics ranged from questions regarding energy modeling inputs and relevant compliance forms to technical requirements for new construction and renovations. Given the small sample size of the soft launch, it is not assumed that these trends will hold for the full rollout of the program.

### ***Regional Forums***

The first 3C-REN regional forum was hosted in San Luis Obispo on August 22, 2019. The event was titled “2019 Energy Code: Changes and Opportunities for the Building Industry.” As the industry prepared for the coming 2019 code change, 3C-REN was able to support a smooth transition and ease the fears of practitioners in the tri-county region by educating our

community about coming changes and answer audience questions. With over 100 participants representing over 50 organizations across multiple sectors, the show of attendance demonstrated a real thirst for this information and a desire to gather locally and network with peers in the region.

Rather than simply explaining the specific changes in the new code cycle, the forum put the code into context. Panelists and keynotes explained *what* was changing and *why* these changes are being made. While it's clear that new code is increasingly stringent (especially for newly constructed residential buildings), speakers discussed the big picture objective of more stringent code: a path towards zero-net-energy, which requires greater energy efficiency and increased integration of renewables and storage.

Energy Codes support two major policy initiatives: Zero-Net-Energy (ZNE) use in all new homes by 2020 and commercial buildings by 2030, and Renewable Portfolio Standards that mandate 50% renewable electricity generation by 2030. The 2019 Energy Codes recognize these goals while presenting new challenges for the building industry. Solar photovoltaic systems are essentially now required on all new home constructions in the state. New measures are encouraged in homes such as battery storage and heat pump water heaters that may help in a demand response event. High performing windows, walls and attics in the building envelope are intended to improve occupant comfort while reducing energy demand. LEDs are encouraged to maximize indoor and outdoor lighting efficiency. High-efficiency air filters are enabled for both residential and non-residential buildings.

The forum explored these topics and spoke to industry concerns around affordability, compliance and enforcement in the face of increasingly complex codes. Generating awareness of the many tools and resources available to simplify the code was another central theme of the forum. Services provided by 3C-REN were welcomed addition as a means to support the tri-county region, which has historically been isolated from the urban hubs that offer greater access to education and training related to code change.

### ***Training***

Working in close coordination with the BPT team, ECC brought several energy code focused trainings to the tri-county region which are highlighted in the BPT section of this report. In addition, ECC focused on planning training events for 2020 that will demystify the new codes and bring clarity to building professionals in the region. 3C-REN found that while some firms were eager to learn about the upcoming code changes in 2020, many were focused on pushing through projects under the prior cycle. The first forum hosted by 3C-REN was able to give an overview of the coming changes, and more in-depth training opportunities were planned for early 2020.

In 2019, the ECC program also offered four training events specifically focused on the CalCERTS HERS Registry. 3C-REN partnered with CalCERTS to bring HERS Registry trainings directly to building department staff in the tri-county region. These four training events were designed

specifically for the public sector, educating building department staff on Title 24 Energy Code compliance process and compliance forms. The events were offered to building departments in Santa Barbara and San Luis Obispo County, and held at their offices to increase participation. The trainings were also open for staff from surrounding jurisdictions to attend and participate. Building department staff learned how to use the CalCERTS HERS Registry and tools that allow enforcement agencies to easily track forms and project status, while achieving the goal of going paperless. Nearly 40 building department staff were trained in Santa Barbara and San Luis Obispo County.

Methods of promotion for these trainings mirrored BPT marketing and outreach methods and included 3C-REN's email listserv, physical promotion such as event flyers at local jurisdictions, and speaking at other relevant events and trainings. 3C-REN's experience promoting trainings to the unique Central Coast market will continue to increase the opportunity for customers of all backgrounds to access resources moving forward. By establishing the foundations of regional training delivery and promotion, 3C-REN can continue to work towards enhancing service for the region's unique building industries and underserved customers.

## 2019 Highlights

### *Energy Codes Coach*

In 2019, the ECC Program focused on the development of the Energy Codes Coach service. The service endeavored to be different from existing energy code assistance services (CEC Hotline, Energy Code Ace, and others) by offering a personal focus on projects and needs. By procuring Franklin Energy (formerly known as Build it Green) to design and implement the service, 3C-REN gained a knowledgeable and respected partner in the state. Additionally, Franklin Energy subcontracted with two local and well-known energy consulting firms that provide extra depth and "boots-on-the-ground" knowledge/availability for in-person/onsite field visits for the service.

"The codes coach service is a quick easy way to get unbiased real-world answers to energy design and installation questions."

Matt Varvel, Plans Examiner for the County of San Luis Obispo

3C-REN and Franklin Energy were able to quickly develop the Energy Codes Coach service and focus on implementation. The first step to bringing the service to market was a test or soft launch with trusted and honest users. Each county team gathered a list of potential private and public users and contacted each to request the use of the system during the soft-launch phase as well as provide constructive feedback of

the service. While nobody took advantage of the onsite field visit portion of the service, many utilized the hotline and web portion of the service.

The feedback received from individuals utilizing the service during the soft launch window greatly improved the Energy Code Coach offering for its full launch on January 2nd, 2020 in preparation for the release of the 2019 Energy Code.

### *Regional Forums*

3C-REN's first regional forum focused on demystifying the new 2019 Energy Code for various participants across the tri-county region. Over 100 building professionals in the private and public sector attended the half-day event to learn less about the "how" of the energy Code but about the "why" behind its development and implementation.

With the exception of the room (being too small for the amount of people) the event was a great success and gave attendees content and resources that was meaningful and useful for professionals on a daily basis. 3C-REN received valuable feedback and comments regarding the first regional forum which included the following:

"The potential to get help for residents of the Tri-county area, navigating energy code requirements and hopefully developing "real word" trade off's in the energy software that help people based on their micro climate locations."

"Diverse panelists. Well-structured to lead attendees through learning the new code and help make them feel comfortable with the updates."

"Talking with the various disciplines to get a better understanding of what they need to know and understand as well as ourselves as it will take a village to work through the new code changes and apply it."

### *Training*

In coordination with the BPT program, the ECC program brought multiple Energy Code trainings to building professionals in the tri-county region. As detailed earlier, the priorities of the ECC program are to increase compliance, enforcement, and comprehension of the Energy Code and California Green Building Standards. Additionally, another main goal is to bring educational offerings and resources that are not normally available to customers to our region.

3C-REN collaborated with the Statewide Codes and Standards team and Energy Code Ace to deliver multiple courses focused on the residential and nonresidential sides of the energy code. 3C-REN also collaborated with Russ King at CalCerts to bring four HERS Registry trainings to the Santa Barbara and San Luis Obispo County Building Department staff.

These efforts provided growth opportunities for 3C-REN staff in planning and execution processes for future collaborations and customized trainings.

### *Developing and Maintaining Relationships*

One of the most important focuses of the 3C-REN is the development of relationships. Without relationships of city building department staff, member organizations, and stakeholders all of the offerings under the ECC program would not have come to fruition through 2019 and beyond.

3C-REN staff focused efforts on traveling to various jurisdictions' building departments to meet with chief building officials and staff to provide an overview of programs and services. In addition, 3C-REN gave public comment to City Councils during when they were adopting the new building codes and further highlighted the services being offered.

3C-REN staff also gave multiple presentations to member organizations like the Central Coast Chapter of the ICC, AIA, Home Builders Alliance, Peoples Self Help Housing, and others to provide an overview of programs and gain valuable feedback and insight on needs.

Lastly, 3C-REN staff has continued to engage and lead an Advisory Committee that consists of building professionals ranging from real estate to contractors to energy consultants to community college staff to gain insight into what the regions needs are surrounding the Energy Code. This committee meets every other month to discuss updates to programs and gather input.

### *Opportunities in 2020 and Beyond*

The ECC team laid important groundwork in 2019 for the continued success and expansion of services in 2020. For the Energy Codes Coach, 2020 will focus on full launch of the service as well as strategic outreach to public sector officials. For forums, the goal will be to host a forum in each of the three counties and cover new and relevant topics. For training activities, the focus will be on increasing the number of offerings across the three counties.

### *Energy Codes Coach*

A key role of the Energy Codes Coach is to serve as the principal customer facing resource of the 3C-REN Energy Code Connect program, building credibility and brand recognition for the program. Through relationship building, training, ongoing technical support and fostering peer-to-peer information sharing across building departments, the ECC will seek to enrich, reinforce, and shift the existing paradigm to one that encourages a culture of compliance through consistent, correct and effective implementation of energy code enforcement best practices across the tri-county region.

Data from the CEC call log demonstrated the need to engage local building departments and target services for private sector professionals. Informed by the statewide relationship, the Energy Codes Coach developed a strategy to meet public and private building professionals in-

person to address questions comprehensively, provide related training resources, and build local relationships. This service offering will begin a pilot program in 2020.

The pilot will rely on site visits to capitalize on the ECC's in-person service delivery as a distinguished market offering for 3C-REN customers in the spirit of the program's initial vision. Under the direction of the 3C-REN team, Franklin Energy will implement a plan to conduct proactive marketing and outreach to jurisdiction and county staff across the region. These efforts will position Franklin Energy to:

- Guide energy code enforcement process improvement through direct interaction and observation of building department personnel with an understanding of the challenges and constraints that building code officials often face;
- Serve as the subject matter expert in energy codes and any provisions specific to each County jurisdiction/climate zone with emphasis on providing cost effective measures which enhance compliance margin and/or improve building safety;
- Provide ongoing education of tri-county building departments on energy code requirements delivered in flexible time blocks and with courses building on one another;
- Share knowledge, mentor code officials and develop department champions to apply best practices through individual counsel, training, and group roundtables;
- Provide ongoing feedback from code officials regarding concerns and perspectives to 3CREN team;
- Develop new tools as required to facilitate energy code enforcement; and
- Facilitate measurement and evaluation of the implementation effort over time.

The ability to deliver in-person services to local building department and private sector professionals is a key strength of 3C-REN and a key market differentiator from existing Codes and Standards services. Providing a comprehensive and meaningful peer to peer service aligns with the vision of the ECC presented within the 3C-REN business plan.

As familiarity with the service increases so will use of the codes coach. Over time, 3C-REN will develop tools and resources that respond to the most common codes coach questions. Analysis of inquiries submitted in 2020 will inform resource development, which may range from checklists and fact sheets to new training opportunities that address sticking points in the new code.

### *Regional Forums*

Survey responses from the inaugural 3C-REN forum in 2019 indicates interest in future forums will remain high. Planning for the next forum in 2020 began in 2019 and will focus on how the energy codes support resiliency in the tri-county region. Devastation from ongoing wildfires in our region makes this a topic of interest, and an opportunity for 3C-REN to empower our local industry with the tools and knowledge to combat this threat.

Another topic of consideration for 2020 is building materials and technologies that support code compliance. With the energy efficiency landscape evolving at a rapid pace, it's important that professionals in our region be exposed to innovations in building material science. Compared to urban areas, there are relatively few events in the tri-county region dedicated to the energy code and energy efficiency, so this forum would take advantage of an in-person gathering to offer hands-on education and training for a topic that is best suited to a live event.

Threaded throughout all forum events, regardless of topic, will be a focus on uniting the public and private sectors. Creating common goals and shared understanding, 3C-REN will help form bridges between these sectors, which can often feel at odds when compliance and enforcement come into play. As new, human to human connections are made through networking breakfasts and breakout discussions at these forums, participants will develop more collegiate and cooperative relationships, supporting higher rates of compliance and easier enforcement.

### *Training*

The 2020 program year will focus on course planning and procurement, with the goal of delivering quarterly training catalogs, allowing stakeholders to plan further ahead and maximize training attendance. Education on the new code cycle will continue to be a priority.

Additionally, the team will explore online training opportunities to expand reach to those who are unable to attend in person events. As with BPT, expanded marketing and outreach efforts will leverage the new 3C-REN website and marketing templates to streamline the work and drive greater participation.

By further leveraging the vast library of trainings offered by Energy Code Ace and the IOUs in 2020, 3C-REN will effectively serve and expand the market for energy code compliance and knowledge in the tri-county region. To further 3C-REN's goal of serving customers and filling gaps not covered by IOU offerings, ECC trainings will be hosted in all three counties in multiple venues to increase access by underserved jurisdictions. Lessons learned from hosting trainings in various locations throughout the territory will contribute to enhanced service in the coming years. Remote availability is increasingly a priority as local geographic and equity barriers have been encountered. Expansion of contact lists and more professional marketing materials will expose new and larger audiences to 3C-REN offerings, both in person and online.

In response to the Covid-19 pandemic, BPT program activity will be transitioned online until it is safe to resume in-person activities.

# HOME ENERGY SAVINGS

## *Program Description*

### **Program Need**

Most of the homes in the tri-county region were built prior to the existence of the California energy code. As a result, homes use more energy, cost more, and are less comfortable, while the cost for improving home energy efficiency is often prohibitive for residents. Historically, residential energy efficiency programs have either been too prescriptive and required expensive, whole-home retrofits, or been limited to low-income households. This has made necessary energy improvements to Central Coast housing stock inaccessible to a large portion of the population.

### **Program Detail**

#### *WHAT*

Home Energy Savings (HES) will provide free direct install energy efficiency measures, and offer higher energy saving measures at a reduced-cost to participating homeowners and renters throughout the tri-counties. Examples of the free direct install measures include LED lighting, smart power strips, and smart thermostats, while co-pay measures include higher energy-saving items and services such as EnergyStar refrigerators, HVAC tune-ups, and heat pump water heaters. As a supplement to installing energy efficient equipment in homes, customers will receive education on additional energy saving behaviors they can implement at home.

#### *WHO*

The program will target Hard to Reach

### **Program Solution**

By offering a menu of both free and reduced-cost energy efficiency measures, historically underserved residents in the tri-county region will get to enjoy the financial, health and comfort benefits that accompany them. The ability for customers to select only the upgrades needed or wanted will allow for ease of participation and encourage deeper energy savings.

(HTR) homeowners and renters. HTR criteria include geographic location, language, income, housing type, and designated disadvantaged community, and HTR eligibility depends on meeting two or more of those criteria.

Initially, the program will focus on single-family residents in San Luis Obispo and northern Santa Barbara Counties, then expand service to the rest of Santa Barbara and Ventura Counties.

#### *HOW*

A variety of marketing and outreach strategies will be employed to promote HES including presentations at community events, targeted ads, and collaborations with other organizations working in our target communities. Interested customers who contact the program will be screened

for eligibility, and scheduled for a site visit, during which, no-cost direct install measures will be installed. An assessment of the home will also be completed, and information on additional opportunities for co-pay upgrades will be presented to the

customer. HES is designed to meet customers where they are and provide services to customers as they are ready. Customers may move forward immediately, or over time as they are able with additional upgrades.

In response to restrictions in place due to COVID-19, the program will be offering virtual home assessments and self-install packages to HES participants to provide them immediate energy savings, continue engaging and educating the public, and to raise awareness of HES program resources.

### *Program Performance and Major Accomplishments*

#### **Program Design**

The focus of 2019 was laying the foundation for launching the program in 2020. This included major milestones such as agreement with the IOUs on program processes, selecting and contracting with an implementer, completing program design, creating a strategic plan for the program, and building out program infrastructure and processes.

A significant amount of time was spent learning about the different requirements and processes the respective IOUs have in place for customer validation and the prevention of double dipping. Many of the processes that IOUs already have in place for their third-party program providers were not ideal for HES. There were some initial discussions about using a front-end customer validation process that could take up to 72 hours. While this process may be appropriate for programs that involve larger projects and longer lead times, it would not work for a direct install program that requires a relatively quick qualification process to maintain customer interest and keep costs low.

Ultimately, it was agreed that front end (pre-installation) customer validation prior to the installation of direct install measures was not required. Instead, 3C-REN, through our HES implementer, will obtain a signed customer application that includes collection of customer information, IOU account numbers, and a disclaimer stating they have not participated in an IOU direct install or rebate program for the same measure within a certain number of years (depends on useful life). The HES implementer will also conduct a visual inspection of the site and obtain a copy of the customer's utility bills. 3C-REN will report monthly on installed projects to SoCalGas to confirm account information, prevent double dipping and report on savings. On behalf of all IOUs, SoCalGas will send back verification confirming the customers' account information and that the customers have not participated previously in an IOU direct install or rebate program for the same measures.

While simultaneously coordinating with the IOUs on program process, 3C-REN began developing a request for proposals for a program implementer to provide input on final program design, conduct marketing and outreach and install EE measures. The County of Ventura's Procurement Department led the process utilizing their Bonfire system. To identify potential respondents, 3C-REN conducted outreach and hosted meetings with stakeholders to socialize the HES program RFP and encourage responses. The Community Action Partnership of San Luis Obispo (CAPSLO) was selected as the implementer for HES. With a long history of implementing residential energy efficiency programs, and established relationships within communities HES will target, they possess a level of expertise that positions them well for success.

3C-REN also conducted an RFP process to select a Verification Specialist to conduct pre and/or post installation site visits for quality control and quality assurance. The Verification Specialist will be responsible for confirming that the building information submitted in the customer application matches the actual site conditions, verifying that all measures have been installed and meet program specifications and note any immediate health and safety concerns.

To design a program that is accessible to, and serves the needs of target communities, 3C-REN staff utilized the support of CAPSLO and Frontier Energy. Through weekly meetings and calls, details of what upgrades customers are interested in, which measures the program will offer, incentive levels for those measures, and other program details were fleshed out. This was a lengthy process for a variety of reasons. Once CAPSLO was selected as the implementer, they provided insight based on their experience that it will be more challenging than expected to get HTR population to invest in co-pay measures. They also provided additional detail about their experience with the appropriate measure mix. For example, in CAPSLO's experience providing some air sealing or weatherization measures is a key component to attracting participation even though there are currently no energy savings associated with those measures. As a result of CAPSLO's input, the measure list was revised multiple times and funds were re-allocated to cover a higher portion of costs for direct install measures versus copay measures.

After the main components of the program were finalized, staff drafted a strategic plan for the following year. Overall vision for the program was articulated as well as major goals and objectives for year one. Many of the tasks outlined revolve around formalizing program processes and procedures. Drafts of the Program Manual, customer process flow, intake form, participant agreement, and QA and QC procedures, and others are all in process. Along with the business and implementation plans, these provide overall program structure and guidelines for staff and partners.

Staff also worked on the design of program infrastructure, such as the customer database, branding, and marketing concepts to ensure essential processes and materials are finalized prior to launch.

## **Program Implementation**

3C-REN and CAPSLO staff originally prepared for a March 2020 launch date. Initially, a soft launch of the program was to roll out in San Luis Obispo and northern Santa Barbara Counties. Since the program has very specific audiences, efforts will be focused on targeted neighborhoods and communities. Together, staff and partners identified the first round of target neighborhoods.

A workplan was developed to lay out tasks leading up to, and through the soft launch. The initial launch was also intended to test messaging, tighten up customer processes, and internal procedures.

In preparation to expand service to the full tri-county region, CAPSLO began talks with potential subcontractors to implement the program in southern Santa Barbara and Ventura Counties. A full launch of the program was expected in mid-2020.

However, in light of the COVID-19 restrictions set in place by Governor Newsom's Executive Order NN-33-20, program launch will be delayed until restrictions are lifted. Participants will receive virtual home assessments and self-install packages to provide them immediate energy savings, continue engaging and educating the public, and to raise awareness of HES and Program resources.

## **2019 Highlights**

The creation of 3C-REN was driven in part by the desire to use energy efficiency programming dollars to also create local economic impact and build local capacity. A goal for HES was to identify an implementer that was local, not for profit and already providing services to underserved communities. The selection of CAPSLO as our implementer successfully meets those goals. In addition, CAPSLO plans to subcontract with two other local community-based non-profits, the Community Action of Ventura County and the Community Action Commission of Santa Barbara, to deliver services. 3C-REN funding will help these organizations build their organizational capacity, train staff on new energy efficiency technologies like heat pump water heaters and provide services to a new customers segment.

Together with CAPSLO, the program developed a menu of energy efficiency upgrades to offer that are attractive, affordable and commonly needed in the tri-county region. Benefiting from CAPSLO's years of experience and expertise delivering energy efficiency services, the program is designed to meet customers where they are and continue to offer value over time as they are ready to achieve even greater savings and comfort.

## *Opportunities in 2020 and Beyond*

Looking forward to 2020, the major focus will be implementation of the virtual version of the program, followed by the soft launch of the in-person version of the program after COVID-19-related restrictions are lifted, and then the full launch into the entire tri-county region. Creating relationships with established community partners and organizations will be integral to building a trusted brand and resource.

Marketing will also be an important component of the program to test and hone in on effective messaging, build name recognition, and understand which outreach methods work best.

While our 2020 launch will focus on single-family homeowners and renters, HES is already looking towards serving multi-family residents as well. 3C-REN staff will begin the research and design phase for a multi-family program. Staff will look to existing multi-family programs, gain an understanding of technical and programmatic differences, and characteristics that may be specific to multi-family residences in the tri-county region to use as a basis for early program design with plans to launch in 2021.

## Energy Savings

3C-REN did not have resource programs in 2019.

## Environmental Impacts

3C-REN did not have resource programs in 2019.

## Expenditures

TABLE 1: 3C-REN 2019 BUDGET

Program	2019 Budget
Residential	\$2,896,876
Codes and Standards	\$1,796,748
WE&T	\$1,270,776
<b>Program Subtotal</b>	<b>\$5,964,400</b>
EM&V (3C-REN only)	\$79,028
<b>Total 3C-REN 2019 Spending Budget</b>	<b>\$6,043,428</b>

TABLE 2: 2019 ACTUALS

SECTORS/Programs	Admin	Marketing & Outreach	Direct Implementation	Total
3C REN TOTAL	114,564	32,091	1,336,290	<b>1,482,946</b>
Residential DI	33,110	6,418	406,789	<b>446,316</b>
WE&T	36,152	14,716	366,910	<b>417,777</b>
Codes and Standards	45,303	10,957	561,215	<b>617,475</b>
EMV			1,377	<b>1,377</b>

## Cost-Effectiveness

While the RENs are subject to limitations on the programs that can be offered, (i.e. programs that the IOUs do not plan to offer or programs that fill in the gaps of IOU services, and serving hard-to-reach markets), REN's are not subject to the same cost-effectiveness test that the IOU. However, 3C-REN still works toward delivering cost-effectiveness programs.

## Savings by End-Use

3C-REN did not have resource programs in 2019.

## D.18.05.041 Metrics

### *Residential Direct Install: Home Energy Savings*

The HES program was not launched in 2019; no metrics are reported.

### *Workforce Education & Training: Building Performance Training*

**3C-REN held its first workforce training events in 2019. The following required metrics were tracked for the BPT program:**

- Number of collaborations: 19
- Number of participants: 379
- Percent of participation relative to eligible target population: 2.98%\*
- Percent of participants that meet the definition of disadvantaged worker: 0.26%\*\*

\* Total eligible population for tri-county region estimated to be 12,771 workers. This estimate is based on 321,000 energy efficiency jobs for the state of California cited in a report from the Advanced Energy Economy Institute (AEEI), and the percentage of California's population that is accounted for in the tri-county region.

\*\* DAC zip codes in the tri-county region include 93033, 93030, 93001. As 3C-REN stood up the BPT program, home zip codes were not initially collected. Registration processes were updated late in the 2019 program year to include a request for home zip codes when participants register to attend 3C-REN events.

**In addition to above required metrics, 3C-REN also compiled additional performance information:**

- Number of organizations represented by BPT participants: 109
- Number of jurisdictions represented by BPT participants: 15
- Percentage of jurisdictions represented by BPT participants: 53.57%
- Number of unique zip codes represented by BPT participants: 36
- Number of training providers: 4

### *Codes & Standards: Energy Code Connect*

#### **Closed Permits for Building Projects Triggering Energy Code Compliance**

During design of the ECC program, 3C-REN examined how metrics requirements would shape the program. To track the percentage change in closed permits for building projects triggering energy code compliance, the team explored how to determine which projects trigger the energy code, and how to access permit data from local jurisdictions. Conversations with building and safety departments were scheduled to discuss paths forward on this metric, but the feedback received confirmed there are no existing processes in place to readily track which

projects trigger the energy code. Furthermore, data access was deemed to be a challenge, as digital sophistication (or lack thereof) of the jurisdictions vary. While permit data at the county level is accessible to 3C-REN staff thanks to their use of online platforms, many jurisdictions lack online permitting capabilities.

While exploring how 3C-REN might track and report on this metric, its ability to demonstrate REN value became less clear. Though BPT and ECC trainings and the Energy Codes Coach service all support increased compliance and permit rates, there are many other factors that influence permitting rates, such as the change in total number of projects year to year based on economic health in the region. Discerning the influence of 3C-REN's efforts versus other external factors is not possible, making the value of this metric questionable.

To address this challenge, 3C-REN began discussions with BayREN as the other REN with a Codes and Standards program. Both teams shared concerns and obstacles to reporting on this metric and agreed the best path forward will be to propose alternatives to the REN metrics through the Annual Budget Advice Letter in 2020. The teams are collaborating to propose metrics that better speak to the value delivered by RENs, based on existing REN programs and services. The goal is to propose metrics that are well suited to both 3C-REN and BayREN codes and standard activities, though the RENs have some differences in service offerings and do not overlap in terms of geographic territory.

### **Participation in Energy Policy Forums**

3C-REN held its first energy policy forum in 2019:

- Number of jurisdictions with staff participation in an energy policy forum: 6
- Percent of jurisdictions with staff participation in an energy policy forum: 21.43%

In addition to above required metrics, 3C-REN also compiled additional performance information:

- Total number of energy policy forum participants: 97
- Total number of jurisdiction staff participating in energy policy forums: 22
- Percentage of energy policy forum attendees that are from jurisdictions: 22.68%
- Total number of organizations represented by energy policy forum attendees: 56

### **Energy Policy Technical Assistance**

3C-REN launched a limited scale pilot of the Codes Coach service in November of 2019, which was available to a small number of participants:

- Number of jurisdictions with staff receiving energy policy technical assistance: 1
- Percent of jurisdictions with staff receiving energy policy technical assistance: 3.57%
- Number of buildings receiving enhanced code compliance support: 12

In addition to above required metrics, 3C-REN also compiled additional performance information:

- Total number of unique cases receiving energy policy technical assistance: 12
- Total number of organizations receiving energy policy technical assistance: 5
- Total number of individuals receiving energy policy technical assistance: 6

### **Training Events**

While 3C-REN does not report on statewide training metrics, 3C-REN did compile performance information for training events held under the Energy Code Connect program:

- Total Number of codes and standards training events: 2
- Total number of participants attending codes and standards training events: 17

### **Commitments**

Commitments made in the past year (2019) with expected implementation by December 2020. 3C-REN has zero commitments to carry into future years from 2019.