



Inland Regional Energy Network Business Plan Presentation

WRCOG | CVAG | SBCOG
Riverside & San Bernardino Counties

CAEECC | December 2020



Western Riverside Council of Governments

- 18 cities, two water districts, Riverside County Board of Supervisors, and the Riverside County Superintendent of Schools
- Regional Planning Agency
- Western Riverside Energy Partnership
- Property Assessed Clean Energy
- Western Community Energy



Coachella Valley Association of Governments

- 10 cities, one tribe
- Energy & Environmental Department
- \$4 million grant for Climate Action Plan / Energy Action Plan support
- Desert Cities Energy Partnership
- Property Assessed Clean Energy
- Desert Community Energy



San Bernardino County
Transportation Authority

San Bernardino Council of Governments

- 24 members, and the San Bernardino County Board of Supervisors
- Speak with a collective voice on important issues that affect its member agencies.
- San Bernardino Regional Energy Partnership



Why a new REN in the Inland Empire?

- Provide consistent and expanded EE programs to a region where COGs have long term partnerships with their 52 cities and Board of Supervisors from both Counties.
- Region is distinct from other Southern California areas, with its own robust culture and identity.
- Increasing impacts from climate is increasing the urgency and need.
- Member agencies have nearly a decade of collective experience and existing relationships from implementing EE locally for their constituents.

Why now?

- **Not submitting now could result in up to 4 years delay in starting new programs serving the region.**
- Neither the Potential and Goals decision nor the Cost Effectiveness updates impact the I-RENs Business Plan or offerings.
- I-REN has chosen sectors that are uniquely appropriate for a REN to serve (Public Sector, Codes & Standards, and Workforce Education & Training).
- I-REN can do this work efficiently and effectively for reasonable investment
- I-REN is *flexible* and *adaptable* to pending regulatory decisions and changes

PA Coordination & Local Government Support

Letters of Commitment to Cooperate from other PAs in the region:

- Received from SoCalREN
- Forthcoming from SCE and SoCalGas

Letters of Support received from local governments:

Regional

- Southern California Association of Governments (SCAG)
- County of San Bernardino
- County of Riverside
- Fourth District Supervisor

WRCOG

- City of Banning
- City of Canyon Lake
- City of Eastvale
- City of Jurupa Valley
- City of Lake Elsinore
- City of Menifee
- City of Moreno Valley
- City of Murrieta
- City of Temecula
- City of Wildomar

CVAG

- City of Cathedral City
- City of Indian Wells
- City of Indio
- City of La Quinta
- City of Palm Springs

SBCOG

- City of Chino
- City of Chino Hills
- City of Highland
- City of Twentynine Palms



ABOUT I-REN TERRITORY

I-REN Service Territory

Riverside-San Bernardino- Ontario, CA Metro Area

Core Based Statistical Area in: [California](#), [Los Angeles-Long Beach, CA CSA](#), [United States](#)

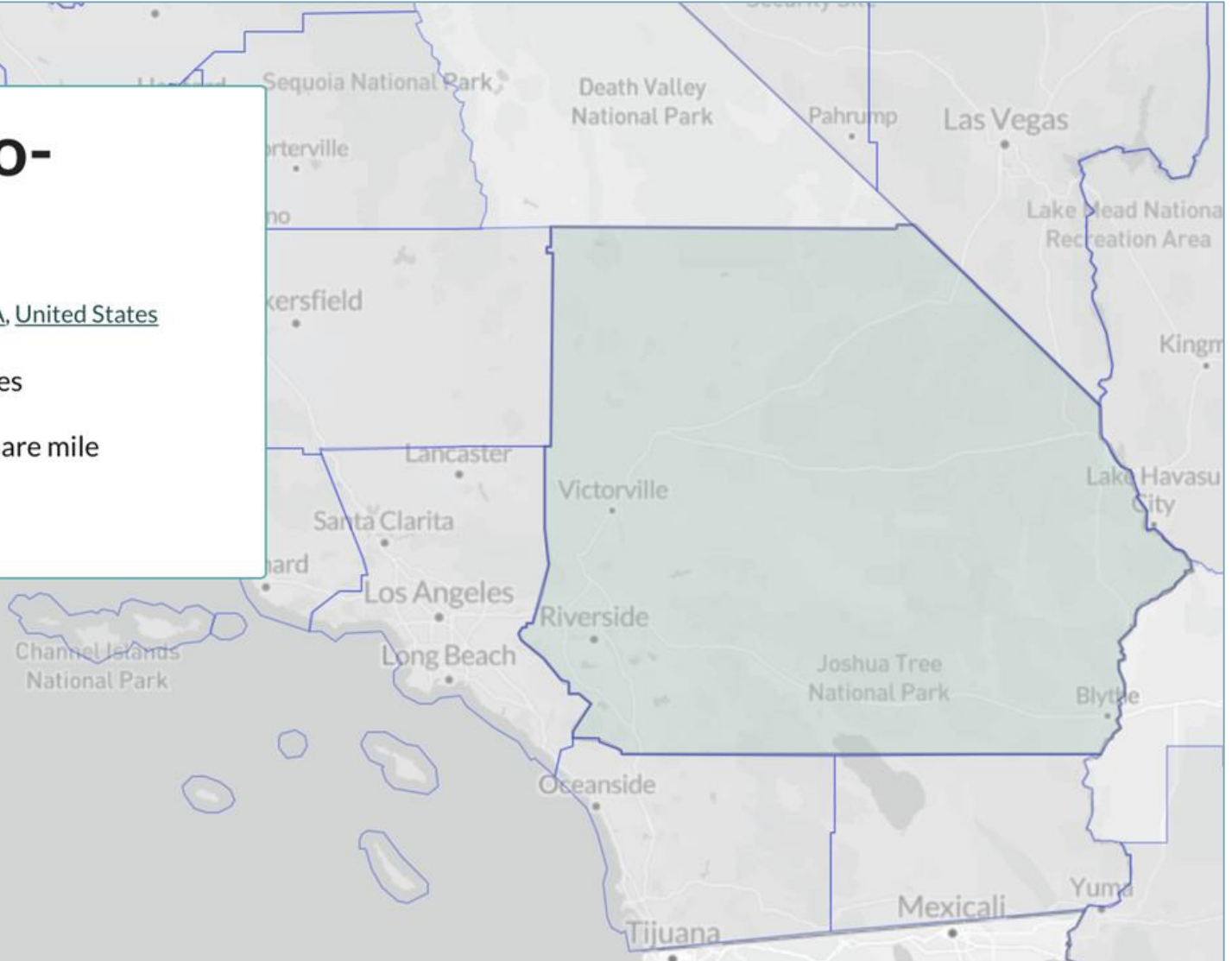
4,650,631

Population

27,276.9 square miles

170.5 people per square mile

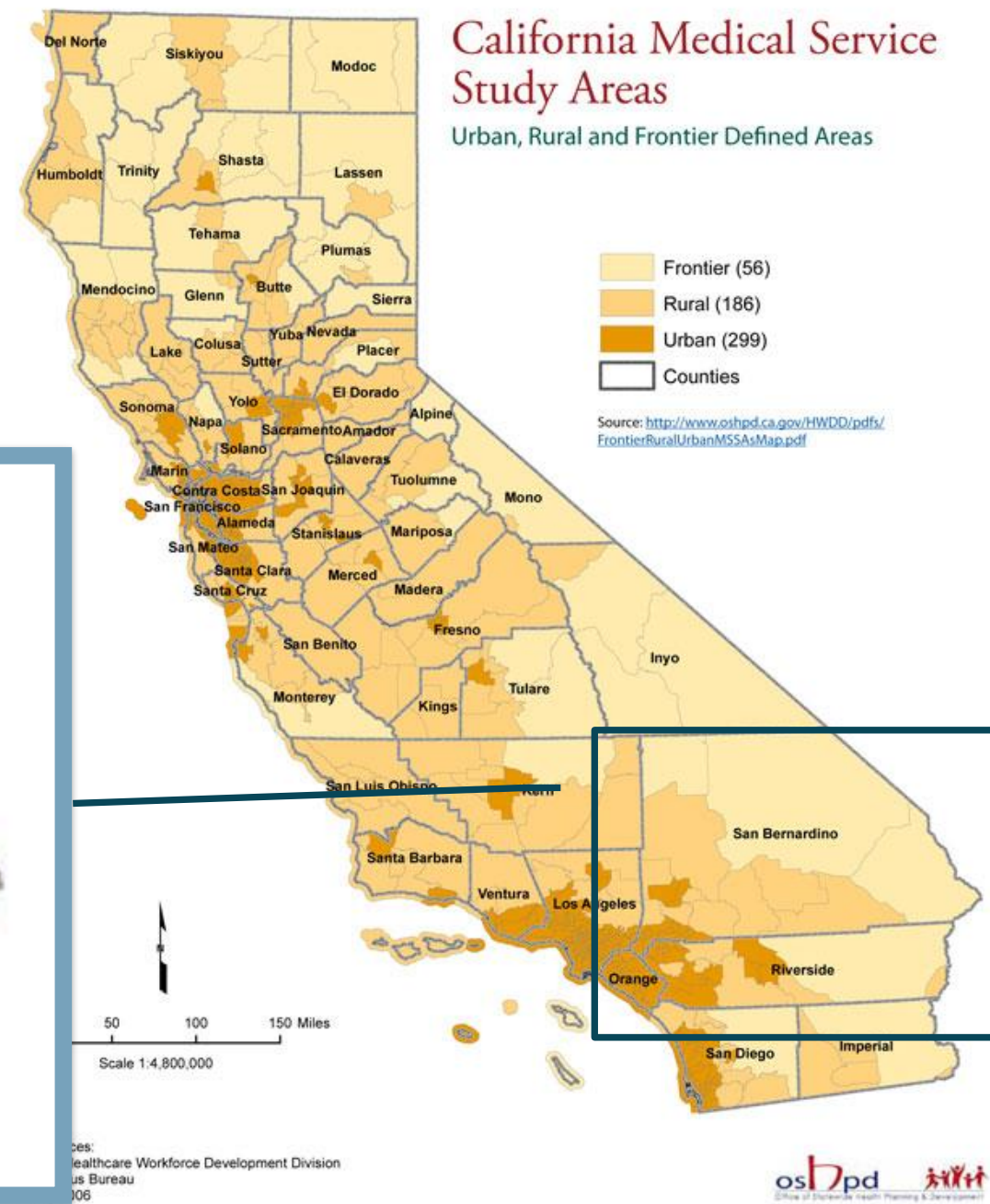
Census data: ACS 2019 1-year unless noted



Inland Empire is large and needs its own REN

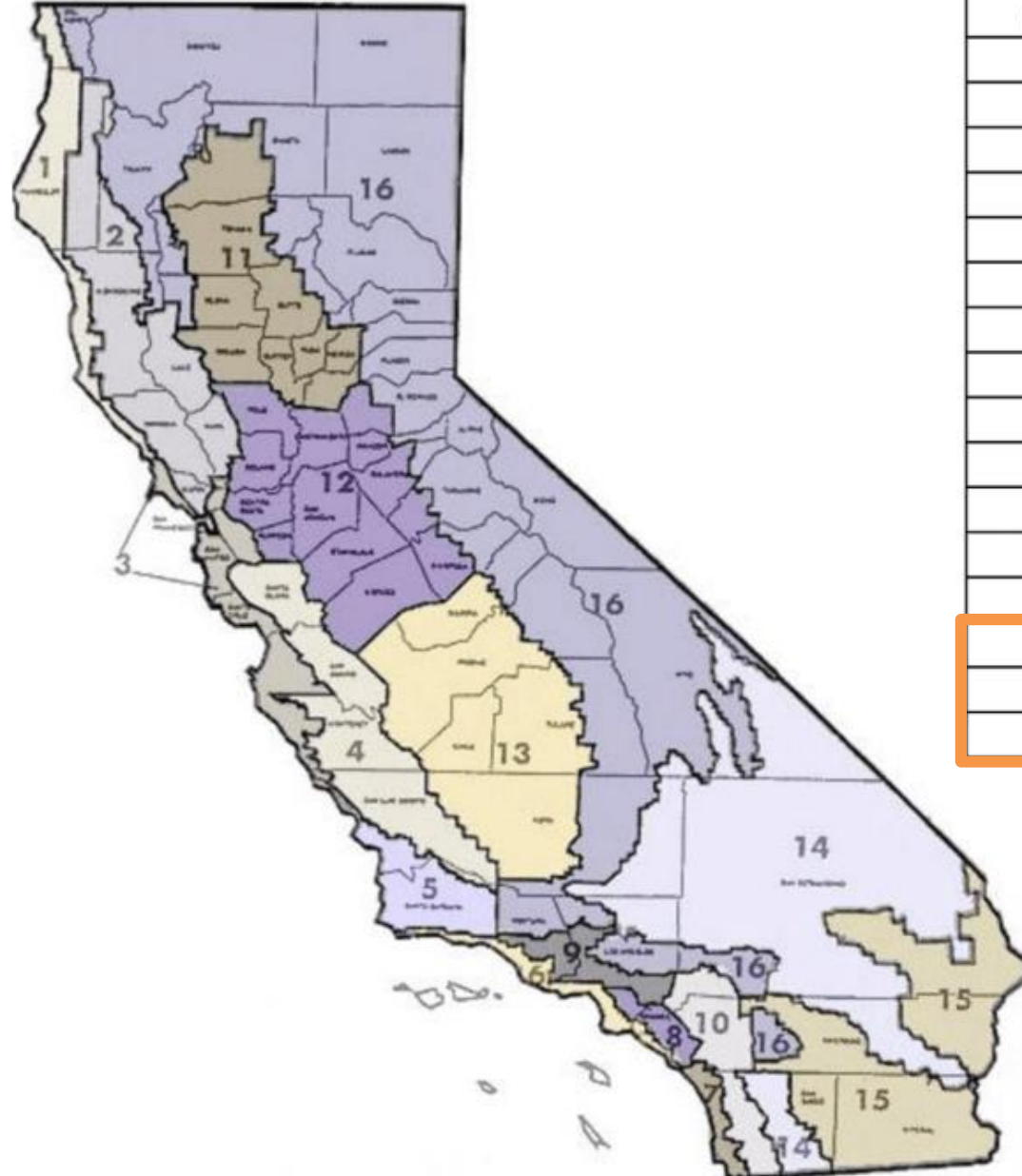
| Organization | Counties | # of Cities | Total Population | Geography (Sq. Miles) | Population per Sq. Mile |
|--------------|----------|-------------|------------------|-----------------------|-------------------------|
| I-REN | 2 | 52 | 4.5 Million | 27,263 | 170 |
| BayREN | 9 | 101 | 7,753,023 | 6,907 | 1,123 |
| 3C-REN | 3 | 25 | 1,581,504 | 7,877 | 201 |
| SoCalREN | 12* | 220 | 20 Million + | 50,000 + | 400+ |

Large areas of underserved rural and frontier areas



Climate Zones

Inland area represents greater number of heating and cooling degree days (HDD/CDD) than most of Southern California



| CA Zone | Average | |
|---------|---------|------|
| | HDD | CDD |
| 1 | 4295 | 15 |
| 2 | 3144 | 500 |
| 3 | 3071 | 183 |
| 4 | 2550 | 666 |
| 5 | 2654 | 464 |
| 6 | 1383 | 742 |
| 7 | 1497 | 865 |
| 8 | 1481 | 1072 |
| 9 | 1460 | 1456 |
| 10 | 1685 | 1620 |
| 11 | 3149 | 1354 |
| 12 | 2621 | 1226 |
| 13 | 2443 | 1599 |
| 14 | 2422 | 3056 |
| 15 | 1177 | 4760 |
| 16 | 5057 | 596 |

I-REN MISSION

To actively participate in California's Clean Energy initiatives and build a stronger clean energy economy and community.

OUR VISION

I-REN's vision is to connect residents, businesses, and local government to a wide range of energy efficiency resources to increase energy savings and equitable access throughout San Bernardino and Riverside Counties.

GOALS & STRATEGIES

Goal 1. Build capacity and knowledge to enable local governments to effectively leverage energy efficiency services and to demonstrate best practices.

Goal 2. Ensure there is a trained workforce to support and realize energy efficiency savings goals across sectors.

Goal 3. Work closely with local building departments and the building industry to support, train, and enable long-term streamlining of energy code compliance.

Business Plan Goals

- Goal 1. Build capacity and knowledge to enable local governments to effectively leverage energy efficiency services and to demonstrate best practices. (*Public Sector Chapter*)
- Goal 2. Ensure there is a trained workforce to support and realize energy efficiency savings goals across sectors. (*WE&T Chapter*)
- Goal 3. Work closely with local building departments and the building industry to support, train, and enable long-term streamlining of energy code compliance. (*Codes and Standards Chapter*)

OUR VALUE PROPOSITION

Building Capacity

Building local government
EE leadership

Strong Workforce

Support economic
sustainability &
strong, local workforce

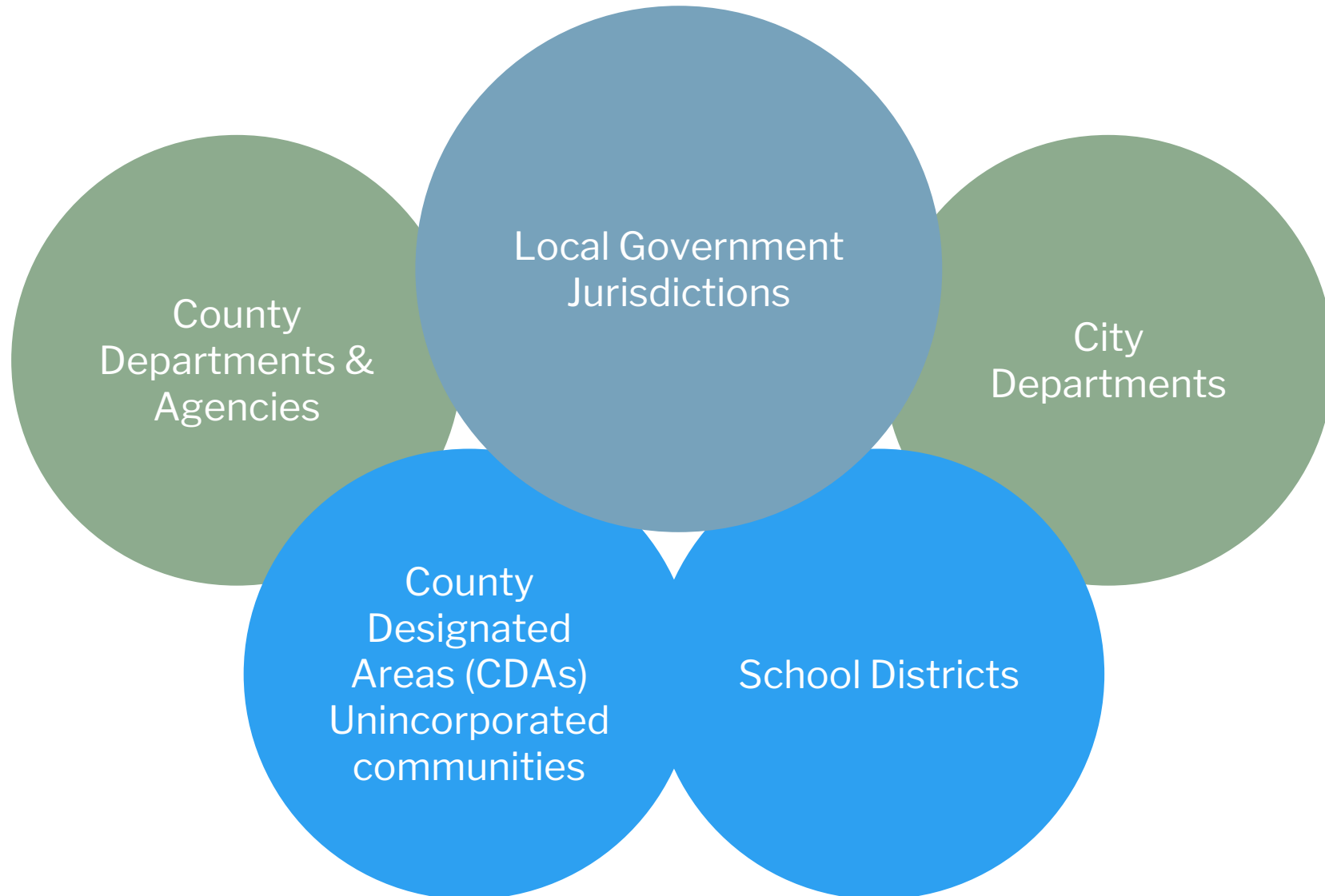
Scalable Tools & Resources

Building Upgrade Concierge
(BUC) & Code Hub



Public Sector

Key Market Actors



Problem, Barriers & Solutions

| Problem | Barriers | Solutions | Strategies |
|---|---|---|--------------|
| Local government staff often lack the time and capacity to pursue complex energy efficiency projects. | Lack of understanding of best practices for energy efficiency solutions. | Technical assistance, locally focused resources, and person-to-person support are needed to develop and implement strategic energy plans for the public sector. | S1.1 |
| There are a variety of EE programs and funding sources, but it is often unclear which apply to local government facilities or how to participate. | Confusion on types of incentives or financing programs and lack of staff resources to apply. | Tailored, locally focused program options are needed, as well as technical assistance and resources to prompt participation in I-REN and other PA programs. | S1.1 S1.2 |
| Due to budgetary restrictions and complicated approval processes, public sector agencies may wait until burnout to replace equipment. At that time, they are forced to make quick decisions, without access to outside funding sources. | Disconnect between funding sources and timing of energy efficiency upgrades. | Strategic energy planning can help create a roadmap to plan for equipment upgrades. Technical assistance and locally focused programs can help agencies leverage resource programs and financing to reduce costs. | S1.1 S1.2 |
| Older, inefficient equipment continues to function, so it is not replaced due to cost and staff resource issues. | Lack of drivers or need for local government agencies to replace existing working, but inefficient equipment. | Technical assistance combined with an incentive or financing option could make the difference in a public sector agency moving to a higher efficiency option for their facility. | S1.1 S1.2 |
| Navigating EE program participation and funding sources is complex and requires a dedicated “Energy Champion” who can devote time and attention to the subject. | Frequent changes in the Energy Champions, with high turnover in staff and overall lack of government staff capacity. | Person-to-person technical assistance and support is critical for maintaining relationships through staffing turnover. | S1.1 |
| Local governments each have their own bureaucratic structure, and it is often unclear how they can enroll in EE programs or apply for financing opportunities. | Varied governance, and funding rules that limit ability to take advantage of typical IOU funding or Local Government Partnerships (LGPs). | Technical assistance resources, and person-to-person support can help agency staff navigate the enrollment and approval process. | S1.1 |



Goal 1.

Build capacity and knowledge to enable local governments to effectively leverage energy efficiency services and to demonstrate best practices.

Strategies

S1.1 Develop a regional Building Upgrade Concierge (BUC) for local governments, special districts, and tribal communities with technical guidance and tools to inform and enable priority energy improvements.

S1.2 Establish incentives and leverage existing financing mechanisms to assist local governments with implementing energy efficiency projects in public buildings.

Essential Program Elements

BUILDING UPGRADE CONCIERGE

Person-to-person Support

Suite of Tools: Online & Print


DESIGN SUPPORT SERVICES

Design Assistance

Develop High Efficiency Public Buildings

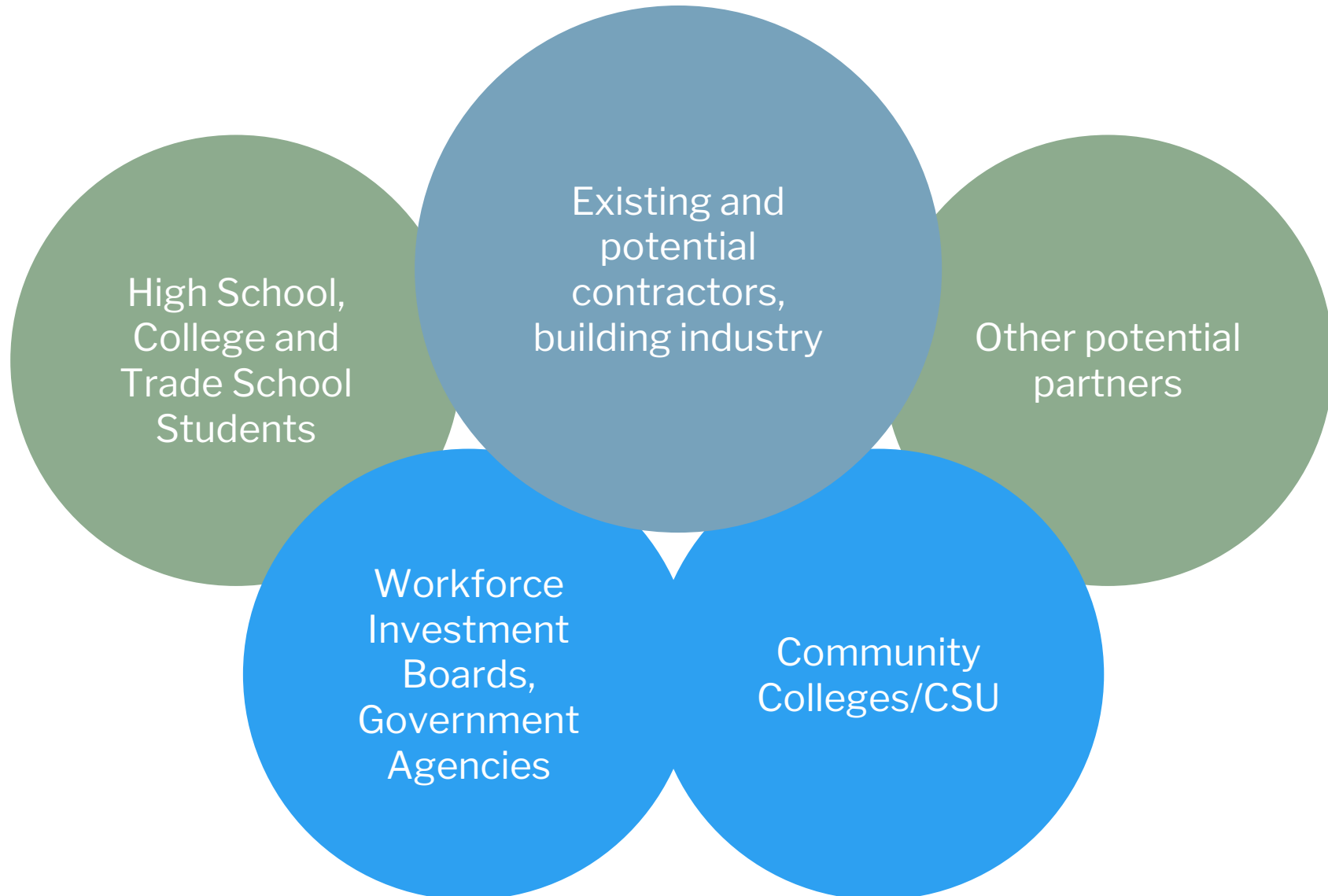
CAPITAL FINANCING

Hybrid Revolving Loan/PACE Program



Workforce Education & Training

Key Market Actors



Problem, Barriers & Solutions

| Problem | Barriers | Solutions | Strategies |
|---|---|---|--------------|
| When employers are hiring for skilled positions in advanced energy and energy efficiency, they can't find people to hire. | Inability to find and retain skilled and qualified workers for the demand. | Foster connections between workforce and industry. Promote relevant training opportunities in collaboration with WIBs to upskill the workforce. Collaborate with employers to provide continuing education for professional development and employee retention. | S2.1 S2.2 |
| Codes and standards compliance and energy efficiency programs require certain certifications and qualifications for builders to participate. | A limited number of builders in the region have the required certifications and qualifications. | Promote relevant training opportunities in collaboration with WIBs to upskill the workforce. Collaborate with employers to provide continuing education for professional development and employee retention. | S2.1 |
| Energy efficiency and advanced energy projects and programs require qualifications that the local workforce does not have. | Lack of qualified workforce in Riverside/San Bernardino Counties, especially in the more remote areas. | Foster connections between workforce and industry. Promote relevant training opportunities in collaboration with WIBs to upskill the workforce. | S2.1 S2.2 |
| Job seekers cannot find jobs in energy efficiency and advanced energy. | Lack of job opportunities in energy efficiency and advanced energy in the region. | Foster connections between workforce and industry. Identify and illuminate the pathways to energy efficiency and advanced energy jobs. | S2.2 |
| Contractors aren't aware of energy efficiency projects, or they cannot or choose not to perform this work. | Lack of interest or knowledge of the opportunities and benefits of energy efficiency projects. | Foster connections between workforce and industry. Promote relevant training opportunities to upskill the workforce. Collaborate with employers to provide continuing education for professional development and employee retention. | S2.1 S2.2 |
| Training is far away and offered infrequently or scheduled during work hours when it's inconvenient to attend. Existing training may be irrelevant to contractors or local projects' needs. | Training opportunities' availability and location pose challenges for contractors to be able to attend and are not designed for the particular needs of the local market. | Promote relevant training opportunities to upskill the workforce. Improve access to training by increasing the number of sites and delivery mechanisms. Collaborate with employers to provide continuing education for professional development and employee retention. | S2.1 |



Goal 2.

Ensure there is a trained workforce to support and realize energy efficiency savings goals across sectors.

Strategies

- **S2.1** Establish local partnerships with existing and potential training providers in the region to deliver targeted and relevant energy efficiency training for contractors and other industry stakeholders.
- **S2.2** Facilitate industry engagement and development of job pathways to identify demand and jobs for a trained workforce.

Essential Program Elements

LOCAL TRAINING

New
Delivery
Channels

Expand
Availability

WORKFORCE DEVELOPMENT

Job
Placement

Facilitate
Career
Pathways

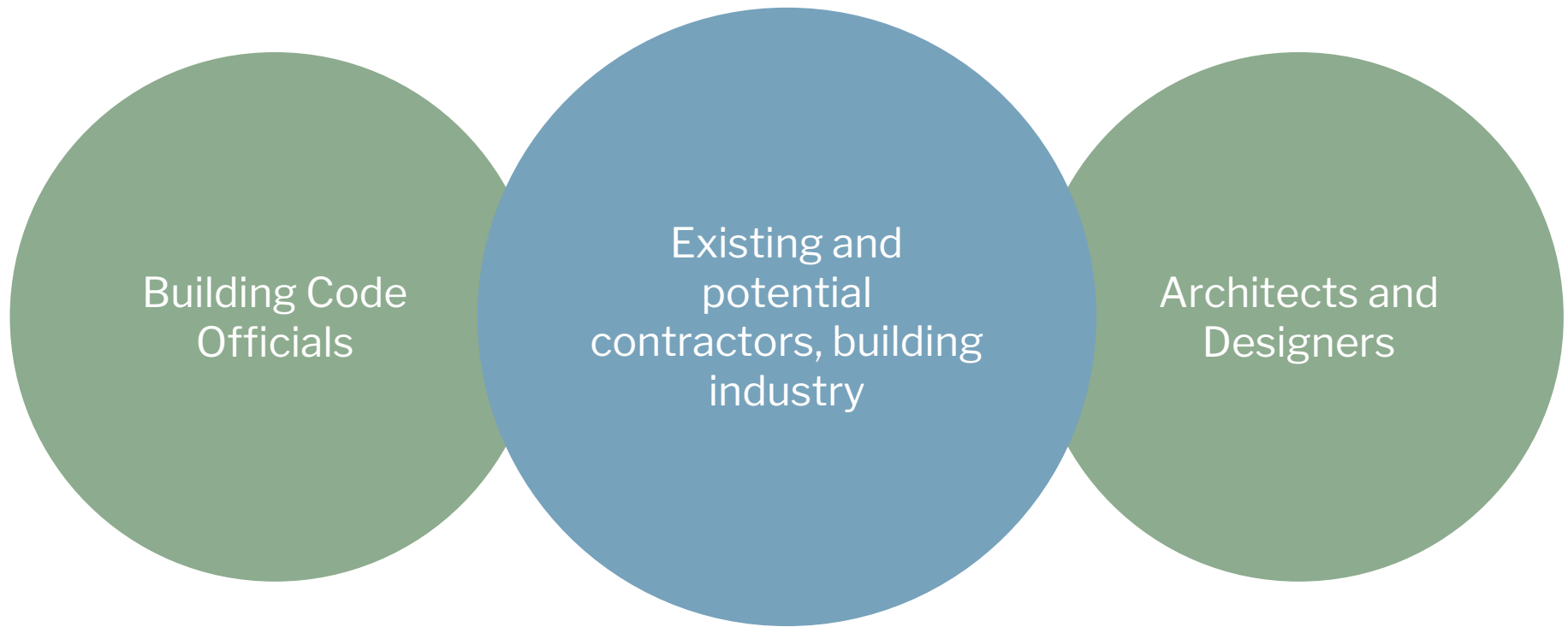
EE CERTIFICATIONS/CLASS SERIES

Residential
& Small/
Medium
Commercial
Needs



Codes & Standards

Key Market Actors



Problem, Barriers & Solutions

| Problem | Barriers | Solutions | Strategies |
|--|---|---|------------|
| Codes and standards are continually being updated <i>and becoming more complex</i> . | Lack of capacity and time to learn details of Title 24, Part 6 and implement effective means to review or enforce. | Technical assistance, tools, training, and resources | S3.1, S3.3 |
| Some local building departments have limited staff resources for enforcing energy codes. | Energy efficiency is a low priority for building departments. Focus is on life and safety issues. | Ongoing training and outreach | S3.1 |
| Some local building departments have limited capacity to monitor and enforce changes, leading to uneven compliance across the region. | Lack of enforcement of permitting of HVAC systems for existing buildings as well as other energy code elements for new construction, especially related to the 2019 code cycle. | Outreach program for both construction firms and local building departments | S3.2 |
| Both permit applicants (e.g. construction firms) and local building department staff have complicated requirements to follow for compliance and enforcement. | Technical questions and issues with permitting, codes, etc. | Technical assistance, tools, and resources | S3.3 |

Goal 3.

Work closely with local building departments to support, train, and enable long-term streamlining of energy code compliance.

Strategies

S3.1 Establish an ongoing training program to assist building department staff and the building industry to support, understand, and effectively implement Energy Efficiency Codes and Standards.

S3.2 Implement an outreach program to engage, educate and involve regional construction firms and building departments, and support compliance and regional EE programs and customers.

S3.3 Develop technical assistance tools and resources to assist building departments and the building industry with understanding, evaluating, and permitting of energy codes.

Essential Program Elements

C&S TRAINING

Targeted,
Local
Training

New
Codes
Support

CODES FORUM

Broad
Education &
Engagement

Codes
Support

CODES COMPLIANCE

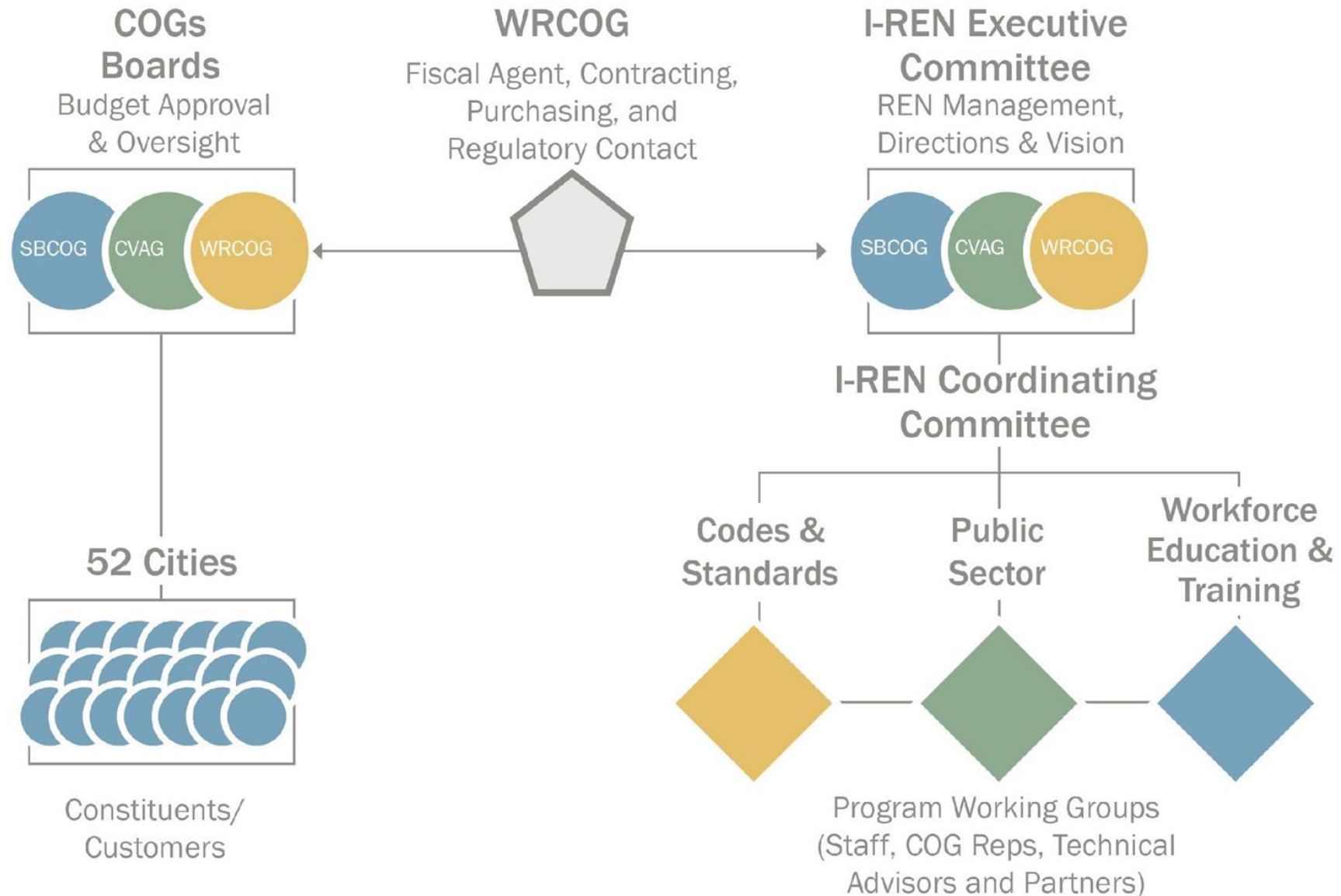
Targeted
Assistance

Consistency



Administration

Governance Structure



I-REN Portfolio Budget

| | 2021 | 2022 | 2023 | 2024 | 2025 | Total |
|--|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Public Sector | 4,314,226 | 6,288,194 | 6,191,722 | 6,629,390 | 7,074,566 | 30,498,098 |
| Workforce Education & Training | 2,312,208 | 2,253,295 | 2,393,426 | 2,437,164 | 2,674,650 | 12,070,743 |
| Codes & Standards | 1,416,066 | 1,446,107 | 1,503,952 | 1,564,110 | 1,626,674 | 7,556,909 |
| Evaluation Measurement & Verification * I-REN Portion | 92,154 | 114,441 | 115,604 | 121,810 | 130,349 | 574,358 |
| Total | 8,134,654 | 10,102,037 | 10,204,704 | 10,752,474 | 11,506,239 | 50,700,108 |

I-REN Portfolio Energy Savings & Cost-Effectiveness

| | 2021 | 2022 | 2023 | 2024 | 2025 |
|----------------------------------|------|-----------|-----------|-----------|-----------|
| Net kWh | 0 | 4,175,629 | 4,361,224 | 4,361,224 | 5,763,031 |
| Net kW | 0 | 720 | 813 | 813 | 1,084 |
| Net Therm | 0 | 121,315 | 147,884 | 147,884 | 196,707 |
| CO2 | 0 | 1,736 | 2,039 | 1,937 | 2,781 |
| NOx | 0 | 640 | 668 | 668 | 883 |
| Total Resource Cost (TRC) | 0 | 0.17 | 0.19 | 0.19 | 0.25 |
| Program Administrator Cost (PAC) | 0 | 0.20 | 0.22 | 0.23 | 0.30 |
| Ratepayer Impact Measure (RIM) | 0 | 0.15 | 0.16 | 0.17 | 0.20 |



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A wide-angle photograph of a cityscape taken from an elevated position. In the foreground, there's a rocky, dry hillside with some sparse vegetation. A few people are walking on a path. Below the hillside, a large cemetery with many small, light-colored headstones is visible, surrounded by trees. The middle ground shows a dense urban area with various buildings, including some taller ones. In the background, a range of large, brown, rocky mountains stretches across the horizon under a clear blue sky.

Thank you