

Submitted: February 08, 2022

Revised #2: March 16, 2022



Building Reach Code Consulting Services for the Town of Truckee

STATEMENT OF WORK

Town of Truckee

RFP issued 02.22.22

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A. Cover Letter

To: Sara Sherburne, Town of Truckee
Cc: Hilary Hobbs, Town of Truckee
From: Melanie Jacobson, ID360
Date: 03/16/2022
Re: Building Reach Code Consulting Services for Town of Truckee

Dear Sara,

Per your request, we have revised the proposal to further support the Town of Truckee sustainability performance goals. The changes can be found in the workplan, schedule, and fee summary with optional services. The changes made are as follows:

- Moved two (2) community and two (2) stakeholder meetings to base services
- Removed CEC Submission task under Task 4
- Reduced Task 3 Community Outreach and Develop Draft Policy Criteria to be limited to providing survey questions to town staff for community administration
- Removed all optional tasks
- Task 6 Supplemental Cost-benefit and Economic Impact Analysis is now Task 5

If you require further information or clarification concerning the changes to our proposal, please do not hesitate to contact me. I look forward to discussing the details enclosed.

Primary Contact for this Proposal:

Company: ID360

Name/Position: Melanie Jacobson, LEED AP + BD&C, Principal

Phone: 650.830.0042 ext. 01

Email: melanie@integrateddesign360.com

Mailing address:

Integrated Design 360 LLC

809 Laurel Street #308

San Carlos, California 94070

This proposal is valid for six (6) months.

Best regards,

Melanie Jacobson
Principal



B. Executive Summary

The Town of Truckee is in a continued state of economic growth and development opportunity. The future of the town focuses on innovation, technology, and sustainable development. The facilities built within the town must be a reflection of the town's environmental commitment.

The Town of Truckee is committed to being a leader in environmental sustainability and is planning to adopt its first Climate Action Plan (CAP) in 2022. This plan will provide a roadmap to achieving emission reductions. The town is currently considering the adoption of a local energy reach code. If adopted, the energy reach code would align with the 2022 California Energy Code. The town is seeking consulting services to assist staff in developing and adopting policies to meet the energy reach code goal. The town staff also seeks support to explore possible incentive programs to compliment the reach code requirements. With our knowledge and experience with City governments in California, ID360 is uniquely suited to deliver the services in an innovative, efficient, and cost-effective manner. Integrated Design 360 LLC (ID360) is pleased to provide a Time-and-Materials Statement of Work for advisory, policy development, and other services to assist the town staff.

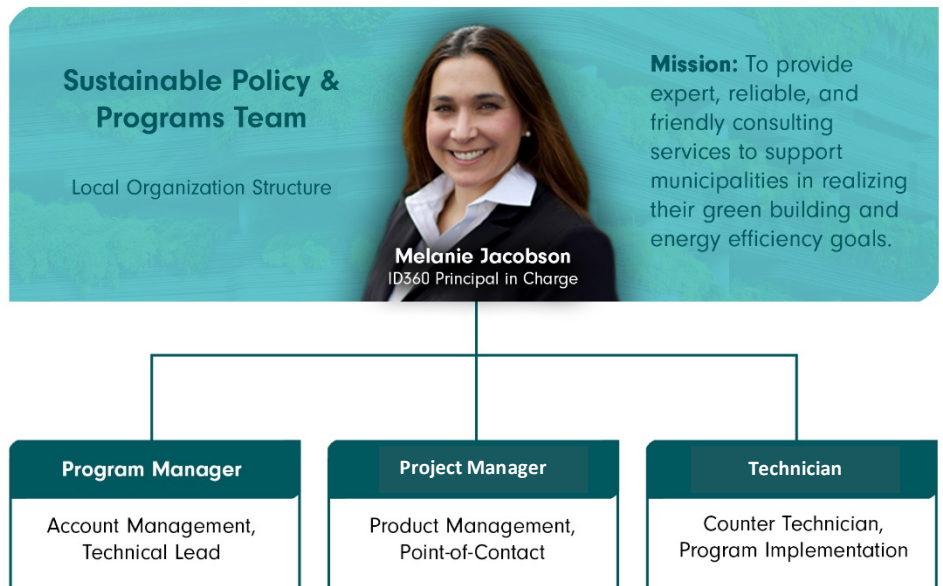
The scope includes providing technical support to develop ordinance language and present to town council for adoption. The ID360 team will collaborate with the town staff and stakeholder groups in creation of new green building and energy policies and guidelines that forward the town's vision to be a leader in sustainable development. We will draw on best-in-class examples and latest advances in technology to promote this goal. We will use exceptional writing and communication skills to craft and articulate these policies and guidelines. The approach includes the project management and support services required to adopt a local energy reach code. See Chapter D scope of work implementation containing the details on activities and deliverables.



C. Company History, Background and Experience

ID360 Information

ID360 is an experienced green building consulting firm offering Sustainable Policy & Programs and Sustainable Building Services to City governments across California and the United States. ID360 provides a range of services including local policy development, program management, stakeholder engagement, CALGreen compliance services and, plan check and inspection. Located in Menlo Park, CA, ID360 is proud to be a certified, women-owned small business, utilizing integrated, collaborative processes to improve building performance and government organizational processes. Melanie Jacobson, Principal, founded ID360 in 2011. ID360 has a Dunn & Bradstreet Account with a DUNS number of 83-849-8504. The local organizational structure includes the company's Principal, Melanie Jacobson, acting as the Principal and Sponsor, with a Program Manager, Project Manager, and Associate assigned to fulfill project commitments.



We are all about decarbonizing our buildings and communities.

- 57** Projects
- 12** Ordinances
- 12** Community Programs
- 25** Certifications

ID360 is a Menlo Park-based sustainability consulting company with a focus on innovative sustainable design policy, community program development, green building project management, contract education, and strategy consulting. We are experts in green building codes, rating systems, and municipal green building and sustainability programs.

We have developed local ordinances and community programs for several local jurisdictions in California including the cities of South San Francisco, Palo Alto, San Luis Obispo, Menlo Park, Foster City, and San Mateo. We utilize integrated, collaborative processes to improve efficiency for buildings and government organizations. We lead in climate change, sustainability, green building, energy efficiency, water efficiency and resilience. Our firm offers a high-quality and on-demand Virtual Help Desk as a green building community program. The Help Desk supports building permit applicants on behalf of the green building program for a city's building department staff.

We have worked with several private sector clients to advance their sustainability goals including Safeway, Inc., Alexander and Baldwin, Vantage Data Centers, and Hensel Phelps Construction Co. ID360 is a Woman-Owned Small Business (WOSB), Small Business Enterprise (SBE), and Disadvantage Business Enterprise (DBE). We are fully certified by the state and federal government. Melanie Jacobson, Principal founded ID360 in 2011.



1M metric tons of CO2 emissions reduction



102M gallons of water saved



18M BTU of energy saved

SERVICES

- Policy Development & Adoption
- Green Building Certification & Wellness Consulting
- Community Program Development & Implementation
- Green Building Virtual Help Desk
- Local Government Operational Support
- Community College Partnerships & Industry Exam Preparation



Services



Sustainable Policy & Programs

Sustainable Building Services

Supporting City Managers, Planning Directors, Building Officials, and Public Works Directors in Demonstrating Green Building and Sustainability Leadership!



Policy



Green Building



Education/Certification



Compliance



Policy Development & Adoption



Policy Compliance Support



Custom Program Development



Education & Outreach

Sustainable Policy and Program Services



Green Carpet Service

Supporting organizations in fulfilling sustainability goals.

Sustainability & Climate Action Implementation Support Services

We offer sustainability and climate action plan implementation services to clients enabling organizations to fulfill on their sustainability objectives. Our services are flexible to meet the needs of our customers.

Strategy & Governance

Strategic services to assist senior management in developing and creating innovative solutions to complex challenges.

Program Management

Sustainability program support services to turn sustainability and climate action visions into reality. We create intelligent systems to fulfill on program requirements.

Project Management

Project Management services aimed to deliver projects on-time and on-budget.

Policy Development & Facilitation Support Services

We support the development of new local policy to reflect the community commitment to sustainability, climate change, green building, electrification, electric vehicles, and Construction & Demolition. and resilience.

Policy Support

Support the development of local policies around sustainability, green building, climate change, and resilience.

Stakeholder Engagement

Coordination support for stakeholder groups tasked at producing a measurable result.

Stakeholder Meeting Support

Strategy and technical support to conduct and facilitate stakeholder meetings or when speaking before elected officials.

Staff Extension Support Services

Some specific initiatives do not require new staff but instead would be better fulfilled by professional program managers. Our staff is available for program management via on-site or remote services.

Virtual Green Building Help Desk

Professional staff ready to take questions and facilitate results for public customers.

Education & Outreach Support

Professional education & outreach to support community engagement.

Plan Check Support & Training

Technical Plan check to enforce codes and standards.

Inspection Support & Training

Field inspection to enforce codes and standards.

Clients

Public Sector Clients

Demonstrating Leadership in Climate Change and Sustainability

From decarbonizing buildings to implementing new bold policies, ID360 provides consulting services to help fulfill sustainability goals and position your organization and community as a sustainable leader for the future.



Virtual Help Desk

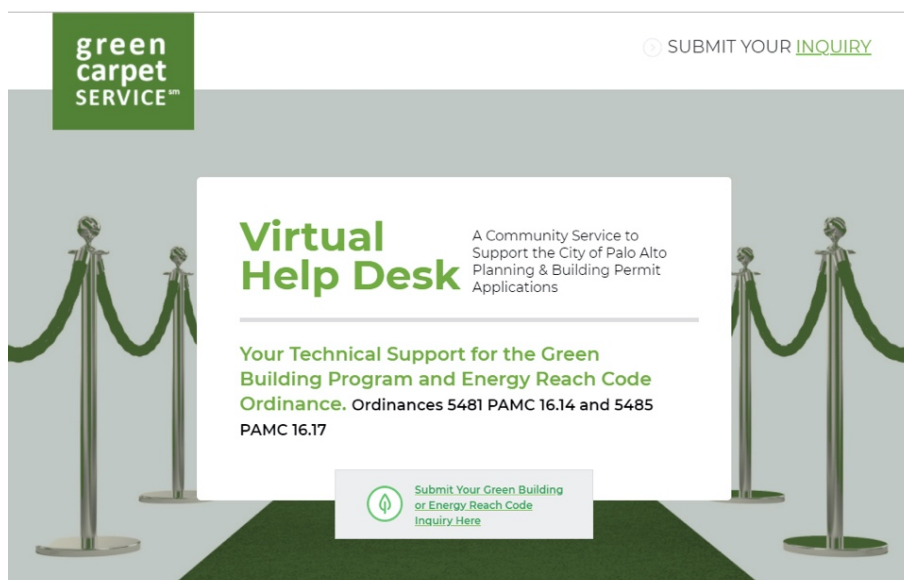


Helping City Officials Lead and Administer Sustainability Programs with Confidence

The ID360 staff has been working on green building and energy regulations with local city officials on the SF Peninsula since 2014. The rapidly changing economics and policies related to green building and energy codes can seem like a moving target to city leaders. The changing policies increase the environmental stewardship responsibilities of city officials while staff seem to have less and less time to devote to these complex challenges.

Community members are requesting staff attention be put on these subjects and city officials are seeking methods to lead in the community. ID360 has developed the Green Carpet Service for City Officials by leveraging our expertise, technology, and superior customer service to provide exceptional resources regarding green building and energy related codes. We are here to help your staff lead and are always available when you need us!

We have developed an innovative service model to support our clients using our Virtual Help Desk for Sustainable Community Programs.



Example Virtual Help Desk

Visit www.greencarpetservice.com/COPA to view example active site.

Virtual Help Desk



Our Green Building Officials Are On-Demand at Your Service!™

We know it isn't easy keeping up with the ever-changing sustainability guidelines, rules and regulations of the building industry. We are here to help! We provide expert and reliable technical support and are on-call and ready to help.



Applicant



Email



Help Desk Tickets & Next Business Day Response Time



Live Chat Monday-Friday 9am - 12pm PST, excluding holidays

Green Building
Help Desk Provides:

- > On-Call Technical Experts for the Palo Alto Green Building & Energy Reach Code
- > Green Building Help Desk Available by Email and Chat
- > Ticket System & Next Business Day Response Time for Inquiries
- > Solutions to Local Green Building & Energy Reach Code Challenges
- > Solutions to Your Local Green Building & Energy Reach Code Compliance Issues During the Permit Process

At Green Carpet Services we are poised to help communities, builders, contractors and architects meet the local Green Building & Energy Reach Code standards.

[Submit Your Inquiry](#)

Established 2020

ID360 Academy

In partnership with the College of San Mateo, we can offer a Green Building Certificate to your staff to help them stay up to speed to implement the city's innovative policies!

Keep your staff up to date with our comprehensive 4-day bootcamp to teach building officials, plan checkers, and special inspectors about the California Green Building reach codes and code compliance. We are here to help!

Enterprise pricing available



[REGISTER TODAY!](#)

Green Building Certificate
Online Program 2021-2022

The building codes are only getting greener.
Are you Prepared?

With recent changes in federal and state policy, we can expect our building codes to have more and more green features in the future. As new enforcement measures and green building ordinances are adopted, we are your resource to help you stay informed on current requirements and implementation methods.

[Learn More](#) [Enroll Now!](#)



D. Scope of Work and Implementation

Background

The Town of Truckee staff and community members are committed to environmental sustainability and the proposed local reach code must be a reflection of this commitment for facilities built within the town. The Town of Truckee has committed to reducing its greenhouse gas (GHG) emissions to 80% below 2008 levels by 2040 and is planning to adopt its first Climate Action Plan (CAP) in 2022.

Goal

The goal of this scope of work is to provide policy development and adoption consulting services to support the Town of Truckee to adopt a local energy reach code ordinance in accordance with the requirements of the California Energy Commission (CEC) and reflective of the local building department permit data. In addition, the goal is to explore possible incentive programs to compliment the reach code.

Activities

The workplan is organized into the following tasks and is based on the RFP and our experience in developing similar policies:

- Task 1 - Program Initiation and Project Management
- Task 2 - Perform and Report Initial Research
- Task 3 - Community Outreach & Develop Draft Policy Criteria
- Task 4 - Local Policy Adoption, State Agency and Rollout
- Task 5 - Supplemental Cost-benefit and Economic Impact Analysis

SCHEDULE					
	2022				2023
Task	Q1	Q2	Q3	Q4	Q1
Task 1					
Task 2					
Task 3					
Task 4					
Task 5					

ID360 WORKPLAN: POLICY DEVELOPMENT & ADOPTION			
#	Task Name	Duration	Total Hours
	Task 1 - Program Initiation & Project Management		23.0
a	o Project Definition Meeting & Develop Schedule: Organize and attend a project definition conference call with the town staff project lead to discuss strategy and overall project. Assumes meeting prep with Agenda, attend meeting, and deliver meeting minutes and project schedule.	1 week	8.0
b	o Project Kick-off: Organize and attend a project Kick off with the town staff to discuss the project scope, goals, timeline and deliverables. Assumes meeting prep with Agenda and PowerPoint, attend meeting, and deliver meeting minutes.	1 Day	8.0
c	o Progress Meetings: Attend a monthly project meeting with the town staff to discuss progress to date on the Workplan and address any coordination items and technical requirements.	Monthly	7.0
	Task 2 - Perform and Report Initial Research		23.0
d	o Preliminary Policy Analysis Report: Collaborate with the town staff to obtain relevant permit data of the past two calendar years. Perform an analysis of the permit data and suggest permit type(s) that would be most relevant for application of an energy reach code in the town. The report will cover relevant state and local building codes and best practices related to building electrification and energy efficiency of new and existing buildings. The report will contain a range of energy saving building policies feasible for implementation in climate zone 16.	1 week	23.0
	Task 3 - Community Outreach and Develop Draft Policy Criteria		104.0
e	o Stakeholder Meetings Agenda Development, Marketing, and Technical Support: Attend and facilitate one (2) 90-minute industry stakeholder engagement meetings with local contractors, architects, and building owners for gathering feedback on the energy reach code regulation. For the meeting the following will be prepared: a) community meeting agendas, b) powerpoints, c) "Event Brite" webpage for signup, d) email blast to stakeholders e) correspondance with community members via email as directed by City staff, f) meeting minutes. Assemble results into a summary table and narrative paragraphs to use in the staff report. For in-person meetings, travel expense are outlined in Chapter E.	3 weeks	23.0
f	o Community Meetings Agenda Development, Marketing, and Technical Support: Attend and facilitate one (2) 90-minute community meetings with local residents for gathering feedback on the energy reach code regulation. For the meeting the following will be prepared: a) community meeting agendas, b) powerpoints, c) "Event Brite" webpage for signup, d) email blast to stakeholders e) correspondance with community members via email as directed by City staff, f) meeting minutes. Assemble results into a summary table and narrative paragraphs to use in the staff report. For in-person meetings, travel expense are outlined in Chapter E.	3 weeks	23.0
g	o Create and Administer Online Survey, Send Email Blast: Develop a survey using "Survey Monkey" to engage the community, work with the town staff to send the survey to the town's contact list using the typical communication method provided by the town. Assemble results into a summary table and narrative paragraphs to use in the staff report.	2 weeks	3.0

h	<p><u>o Develop Policy Direction Matrix with 'strawman' model code regulation in Excel and Update:</u> Using the list of ideal policy requirements from the town staff, create the outline of the policy language to be used as a baseline. The matrix is a tool to house and think through the details of the possible model code language, the interested community organizations, educational aspects, compliance process, related municipal code sections, etc. The matrix will house the cost-effectiveness results (developed by others). The intent will be to update and revise the document as the project evolves. Assumes initially one iteration and one (1) round of comments and updates.</p>	6 weeks	22.0
i	<p><u>o Policy Development. Cost-Effectiveness & Research Support:</u> Coordinate project content to align with the results of the cost-effectiveness study. Cost-effectiveness study to be performed by others. Perform policy research to support the changes to the policy criteria in the local municipal code. Perform State and Federal policy research for amendment to the State code within the municipal code. Communicate with State and Federal agency staff, as needed, regarding the evolving policy development direction.</p>	4 weeks	33.0
Task 4 - Local Policy Adoption, State Agency Approval, Rollout			41.0
j	<p><u>o Codification Support:</u> Deliver the Final Policy Matrix to the project team. Attend one meeting with the town staff to finalize the regulation requirements in coordination with the cost-effectiveness consultant. The final version in the Policy Direction Matrix will house the final model code language. It is assumed that the final code will be written and approved by the Town Attorney.</p>	3 weeks	19.0
k	<p><u>o Staff Report Writing & Town Council Meeting Technical Support for Code Adoption/Public Hearing:</u> Provide technical writing support to assemble staff report for model code language. Provide PowerPoint Presentation for Council meeting. Attend one Town Council meeting and provide presentation support to the town staff for code adoption. Assumes Town Council packet is due six weeks prior to Town Council meeting. Assumes PowerPoint Presentation is due two weeks prior to Town Council meeting.</p>	8 weeks	22.0
Task 5 - Supplemental Cost-benefit and Economic Impact Analysis			49.0
p	<p><u>o Supplemental Cost-benefit and Economic Impact Analysis:</u> This task will be executed at the discretion of city staff based on 1) the reach code criteria and items not addressed in the statewide study, and/or 2) feedback requests from community engagement meetings and City Council. The team will develop a custom cost-benefit and economic impact analysis representative of the City's current building development and estimates from local contractors. The study will be performed by TRC as a subcontractor on the project.</p>	4 Weeks	49



E.

Project Budget

ID360 is proposing to contract on a time and materials basis for labor and travel per diem expenses.

FEE BY TASK SUMMARY		
Task	Description	Proposed Fee
Task 1	Program Initiation & Project Management	\$4,417
Task 2	Perform and Report Initial Research	\$4,162
Task 3	Community Outreach and Develop Draft Policy Criteria	\$19,187
Task 4	Local Policy Adoption, State Agency Approval, Rollout	\$8,100
Task 5	Supplemental Cost-benefit and Economic Impact Analysis	\$9,000
	Task 5 Contract Administration 20%	\$1,800

FEE SUMMARY		
Task	Description	Proposed Fee
	Subtotal Base Services Fee	\$46,666
	Travel per diem (4 round trips to Town of Truckee)	\$1,900
	Base Services Total	\$48,566

ID360 HOURLY RATES			
Design Phase			
	Labor Category	Rate (2022)	Rate (2023)
	Principal	\$263.00	\$271.00
	Project Manager	\$167.00	\$172.00
	Associate	\$116.00	\$120.00



F. Description of Recent Projects/References

ID360 is a green building consulting firm serving clients throughout California and the United States. We assist our clients in setting specific environmental building objectives, and we work with personnel to achieve extraordinary results. We use calculated and proven techniques to lead teams to meet energy-efficient and environmentally responsible goals.

Previous Expertise on Similar Projects

Energy Reach Codes and Green Building Ordinance Expertise from Various California Cities.

ID360 has worked with many other cities in California to develop local green building and energy reach code programs. Examples of other cities include the additional information about each project can be found on the following pages. The firm has consulted on numerous projects with expert advice around local Energy Reach Code development and compliance and has assisted projects in meeting the specified environmental building standard. This expertise has enabled the firm to provide leadership to architects, engineers, inspectors, contractors, and building owners. ID360's prior experience is outlined in the following contracts:

- City of Palo Alto
- City of San Mateo
- City of Menlo Park
- City of San Luis Obispo
- City of South San Francisco
- City of Foster City

Figure 1 - Pertinent Project Experience Table

PROJECT NAME	START - END DATE	CLIENT NAME AND INFO FOR REFERENCE
EV and Electrification Reach Code Development for the City of South San Francisco	11/2020-Present	Ms. Christina Fernandez Assistant City Manager, Chief Sustainability Officer City of South San Francisco Phone: (650) 272-7431 Email: christina.fernandez@ssf.net
Program Development and Implementation for Local Energy Reach Code "Clean Energy Choice Program" for the City of San Luis Obispo	8/2020 - Present	Ms. Teresa McClish Special Projects Manager City of San Luis Obispo Phone: 805.783.7840 Email: tmcclish@slocity.org
Green Building Ordinance and Energy Reach Code Ordinance Development and Support to City Departments for the City of San Mateo	06/2015-01/2017	Ms. Kathy Kleinbaum Deputy City Manager City of San Mateo Phone: (650) 522-7153 Email: kkleinbaum@cityofsanmateo.org
Green Building Program for the City of Menlo Park, LEED Performance Program	06/2017-04/2018	Ms. Deanna Chow Assistant Community Development Manager City of Menlo Park Phone: (650) 330-6733 Email: dmchow@menlopark.org
Green Building Program Management for the City of Palo Alto, Green Building and Energy Reach Code Development and Rollout	8/9/2014-Present, Three contract awards	Mr. David Chung Assistant Building Official, City of Palo Alto Email: David.Chung@CityofPaloAlto.org Phone: (408) 846-0451 Mr. Peter Pirnejad Formerly - Development Services Director, City of Palo Alto Current - City Manager of Los Altos Hills Phone: (650) 947-2514 Email: ppirnejad@losaltoshills.ca.gov

CASE STUDY

CITY OF PALO ALTO

PROGRAM DESCRIPTION

Since 2014, ID360 has supported the City of Palo Alto to ensure the highest quality control and implementation management for the roll-out and enforcement of the Green Building Program.

ID360 supports an interdepartmental group of staff stakeholders to ensure the green building and energy policy is enforced properly on projects during the Planning, Plan Check, Inspection, and Post-Occupancy phases. ID360 has developed a customized program to sync with the entitlement process and compliance procedures.

As a strategy & policy consultant to the City of Palo Alto, ID360 has worked with stakeholders and city staff to adopt and implement local green building and energy reach code regulations that are more aggressive than the State of California requirements.



CITY OF
**PALO
ALTO**

PROGRAM HIGHLIGHTS

- Green Building and Energy Reach Code Ordinance development assistance
- Stakeholder engagement and public meeting facilitation
- Program coordination amongst city planning and building departments
- Entitlement support for green building and energy compliance
- Plan check and inspection support for green building and energy regulation
- Green Building Help Desk technical support staff
- Building Electrification Study
- City Council and Commissions presentations and technical support

CITY OF MENLO PARK

PROGRAM DESCRIPTION

ID360 teamed with DNV-GL to create an innovative LEED Review Program for the City of Menlo Park. The ID360 staff incorporated our proven green building program design elements as a guide to inform the structure, strategy, and delivery model. The program is a pathway for the enforcement of the local municipal green building ordinance. The program ensures the highest level of quality control and implementation management for the roll-out and enforcement of the Green Building Program.

The program is designed to create predictability and transparency for the project applicants in all phases of Planning, Plan Check, and Inspection.



PROGRAM HIGHLIGHTS

- Development of LEED Review Compliance Instructions aimed to support city staff in maintaining a predictable compliance pathway for public applicants
- Custom green inspections program to help staff streamline operations
- Program coordination to support the city's planning and building departments
- Entitlement compliance support for local LEED municipal requirements
- Plan check and inspection compliance procedures for local green building and energy regulation using the LEED Rating System as a guide.

CITY OF SAN MATEO

PROGRAM DESCRIPTION

The City of San Mateo Climate Action Plan outlines progressive measures related to the built environment concerning renewable energy, energy efficiency, and electric vehicle (EV) charging.

ID360 supported city staff and stakeholders to create a solar power mandate and EV charging infrastructure policy to comply with the requirements within the City of San Mateo Climate Action Plan. The policy focuses on a solar power mandate and EV charging infrastructure for new commercial, multi-family, and single-family residential construction.



PROGRAM HIGHLIGHTS

- Solar Power & EV Charging Infrastructure development assistance
- Coordination with California Energy Commission staff for Energy Reach Code compliance and public comment
- Project alignment and compliance with the Climate Action Plan
- Plan check compliance guideline for green building and energy regulation
- City Council and Commissions presentations and technical support

CITY OF SOUTH SAN FRANCISCO



PROGRAM DESCRIPTION

The City of South San Francisco has a unique set of circumstances and challenges related to reach code. ID360 was contracted to support the City in the adoption of a local Energy Reach Code and EV Reach Code and address the policy barriers present in the city. Our team has assisted staff in developing and adopting policies to meet the Energy Reach Code and Electric Vehicle Charging Ordinance goals. ID360 has provided advisory, policy development, and program design and implementation services.

The project approach included the project management and support services required to adopt a local Energy Reach Code based upon the model ordinances developed by Peninsula Clean Energy (PCE) which include all electric and mixed-fuel scenarios. The project was coordinated with a team of internal stakeholders to define the policy requirements. ID360 worked with city staff, and other supporting consultants, to develop the reach code criteria for local adoption.



PROGRAM HIGHLIGHTS

- Energy Reach Code policy research and development support
- Electric Vehicle Charging Infrastructure ordinance development
- Community outreach and city council meetings support
- Policy and program roll-out support in alignment with compliance strategy

CASE STUDY

CITY OF SAN LUIS OBISPO

PROGRAM DESCRIPTION

ID360 worked with city staff to develop a comprehensive and easy-to-follow compliance program for the Clean Energy Choice Program. The program is for new buildings and is an energy reach code ordinance that outlines local amendments to the 2019 California Energy Code, Title 24, Chapter 6. For residential construction, the ordinance addresses two energy compliance pathways, the all-electric design and the mixed-fuel design. All newly constructed mixed-fuel design buildings must also meet the city's Enhanced Building Energy Performance and Pre-Wire "Retrofit Ready" requirements for the electrification of future systems. This includes readiness for future systems including heat pump water heaters and all-electric stoves. Buildings designed as all-electric, without the presence of natural gas, are exempt from Enhanced Building Energy Performance requirements. New low-rise single-family buildings, including townhomes and duplexes, and new multi-family buildings are required to demonstrate compliance.



PROGRAM HIGHLIGHTS

- Compliance program development and start-up of program operations
- City staff and community education and outreach
- Program alignment and compliance with the Climate Action Plan
- Plan check compliance guideline for green building and energy regulation
- Green Carpet Service technical support for the community

Consulting Team

Melanie Jacobson, Principal

LEED AP BD&C, ICC CALGreen
Plans Examiner and Inspector,
QWEL



Professional Registrations

LEED Accredited Professional,
U.S. Green Building Council

CALGreen Plans Examiner and
Inspector, International Code
Council

Affiliations & Volunteer

Chair, CHPS Materials Technical
Committee

Member, California Building
Energy Consultants (CABEC)

National Member, U.S. Green
Building Council

Member, U.S. Green Building
Council Northern California
Chapter

Adopter, 2030 Challenge

Member, Collaborative for High
Performance Schools (CHPS)

Education

Bachelor of Science in
Environmental Design, Minor in
Communication, University of
California, Davis, 2004

Design Management, Parsons
School of Design, New York,



Melanie Jacobson is Principal of Integrated Design 360 LLC and a green building and sustainable design strategy expert for local governments. Melanie works with local jurisdictions to integrate feasible and applicable sustainable design and operational strategies for planning and building departments in support of city council governance. Melanie brings leadership in zero-net energy and zero-net water policy and implementation. Melanie is a versatile leader and innovator. She has a track record of creating measurable results that are both environmentally sound and cost-effective. Melanie has worked with municipal customers including the City of Palo Alto, the City of Menlo Park, the City of San Mateo, and the City of San Luis Obispo. She has also worked with corporate customers including Safeway, Inc., Apple, Inc., The Ritz Carlton Hotel Company, and Vantage Data Centers.

Melanie holds a Bachelor of Science in Environmental Design from University of California Davis. Melanie is the former Sub-Committee Chair of the Sustainable Materials Technical Committee for the CHPS green building rating system. She is a LEED Accredited Professional and certified as a California Green Building Code Plans Examiner and Inspector through the International Code Council. She is a member of the California Building Energy Consultants (CABEC), the U.S. Green Building Council Northern California Chapter, and the Project Management Institute.

Representative Work

Sustainability Policy & Programs

- Green Building Program Development, City of Palo Alto
- Zero Net Energy Local Reach Code Ordinance, City of Palo Alto
- Green Building Ordinance, City of Palo Alto
- Electric Vehicle Charging Ordinance, City of Palo Alto
- Green Building and Electrification Program, City of Menlo Park
- Clean Energy Choice Program, City of San Luis Obispo
- Energy Reach Code Development and Adoption, City of South San Francisco
- Climate Action Plan Assessment, City of Foster City
- Solar Power Mandate Ordinance, City of San Mateo
- Electric Vehicle Ready Charging Ordinance, City of San Mateo
- Green Building Program, Vantage Data Centers
- Sustainable Design & Engineering Program, Digital Realty Trust
- Confidential, Ritz Carlton Hotel Company
- Confidential, Apple, Inc.

Selected Commercial Development Projects

- LEED Platinum – Comstock Campus, Santa Clara, CA
- LEED Gold - Safeway Store (Flagship), Santa Cruz, CA
- LEED Silver - Municipal Transit Authority, San Francisco, CA
- LEED Certified - Ritz Carlton Highlands, Truckee, CA



Leila DeSilva, Project Manager

LEED Green Associate,
ICC Calgreen Plans Examiner
& Inspector, QWEL



Professional Registrations

CALGreen Plans Examiner and
Inspector, International Code
Council

LEED GA, U.S. Green Building
Council

Wilderness Basics Certified, Sierra
Club

Education

Bachelor of Liberal Arts and
Sciences in Sustainability, Minor in
Recreation Administration, San
Diego State University, 2015

Ms. DeSilva is a Project Manager with Integrated Design 360. She is committed to sustainable design and construction and ensuring customer satisfaction is achieved on each project. She is skilled at educating others on sustainability concepts and providing superior customer service to our customers. Ms. DeSilva has experience with incorporating green building design concepts into construction documents and supporting architects, engineers and contractors in understanding how to meet a range of environmental standards including CALGreen, CHPS, LEED, T24 Energy Code Compliance, PCBs regulations, and Commissioning requirements. She is certified as a California Green Building Code Plans Examiner and Inspector through the International Code Council.

Ms. DeSilva has received her Bachelor of Liberal Arts and Sciences in Sustainability from San Diego State University.

Representative Work

Highlighted Projects

- CHPS Verified, Fremont High School, Oakland, CA
- CHPS Verified, Folia PreFAB, Oakland Unified School District
- LEED Silver, Ho'okele Shopping Center, Maui, HI
- Energy Ready Reach Code, City of Palo Alto
- EV Permit & Inspection Guidelines, City of San Mateo
- Green Building Program Development, City of Palo Alto
- Green Building Ordinance Development, City of San Mateo
- Energy Reach Code, City of San Mateo
- CALGreen Plan Check & Inspection, City of Palo Alto
- Green Building and Electrification Program, City of Menlo Park
- Clean Energy Choice Program, City of San Luis Obispo
- Energy Reach Code Development and Adoption, City of South San Francisco
- Climate Action Plan Assessment, City of Foster City

Programs

- Dewatering Monitoring Program, City of Palo Alto
- PCBs Compliance Program Development, City of Palo Alto
- Deconstruction and Source Separation Program, City of Palo Alto
- Green Building Program Administration, City of Palo Alto

G. Subcontractor Qualifications and Resume

TRC Reach Code Experience

Southern California Edison Nonresidential Statewide Reach Code Cost-Effectiveness Analysis California • 2018 – 2022

TRC identified cost-effective packages of energy efficiency, electrification, solar photovoltaic (PV), and battery measures for nonresidential buildings in each climate zone in California. We researched the highest performance all-electric systems that can be shown to be cost effective against the mixed fuel baseline.

The project analyzed new construction prototypes including a medium office, a small hotel, and a standalone retail building. TRC simulated a variety of all-electric and energy efficiency measures on the prototypes, collected costs on the most effective measures through expert interviews and online resources, and evaluated the cost-effectiveness of the packages by comparing energy savings benefits to measure implementation costs. TRC performed life cycle cost-effectiveness analysis from a customer perspective and a time dependent valuation perspective.

TRC found cost-effective measure packages containing efficiency-only, efficiency plus electrification, and solar PV and battery packages. Prototypes had unique measure packages based on system types and climate zone. TRC's nonresidential report was critical in passing 30 electrification-related local ordinances (reach codes) across California in 2019 and 2020.

SCE extended TRC's scope to include new construction restaurants and laundry services, and nonresidential alterations measure packages in office, retail, restaurant, high-rise multifamily, and warehouse prototypes. This subsequent work also focused on efficiency and electrification measures.

**Peninsula Clean Energy (PCE)
Electrification and Technical Assistance Consultant
California • 2019 – 2022**

TRC is working with PCE and Silicon Valley Clean Energy (SVCE) to develop and advance building electrification and electric vehicle (EV) infrastructure within 34-member municipalities in San Mateo and Santa Clara Counties. TRC, along with subconsultant DNV-GL, led stakeholder engagement, gathered feedback, and developed a model reach code that was adopted in some form by at least 13 member agencies. Model code language was largely based on cost-effectiveness analysis that TRC performed on a separate project. Reach codes encouraged or required building electrification and electric vehicle infrastructure for both residential and commercial new construction under the 2019 California statewide building code. Many of the resources TRC developed for member agencies, including model codes, template staff reports, a presentation slide library, presentation at council meetings, and implementation checklists were foundational for the adoption and implementation of reach codes across California. Our team is continuing support for other municipalities in adopting and implementing reach codes by identifying tools and process improvements and providing technical support.

**PG&E
2022/2025 Multifamily Codes and Standards Enhancements
California • 2018 – 2022**

TRC is the California Statewide CASE Team multifamily lead for updates to 2022 Title 24, Part 6. Our role in this position, specific to the 2022 code update cycle, is to guide unification of multifamily low-rise and high-rise building requirements in a separate chapter for multifamily buildings and to develop recommendations for improved clarity and stringency of the energy efficiency requirements for multifamily buildings of all sizes and heights. Currently low-rise multifamily buildings comply with the residential requirements and high-rise multifamily buildings comply with non-residential standards. TRC is developing requirements for a list of CASE measures that includes an all-electric pathway, high performance envelope, central heat pump water heaters (including load shifting), domestic hot water distribution, drain water heat recovery, solar thermal water heating, and outdoor lighting power allowance. CASE development includes:

- Conducting market analysis of construction trends and available products
- Analyzing energy and cost for proof of cost effectiveness
- Evaluating environmental impacts
- Identifying code compliance challenges
- Engaging stakeholders to vet proposed code changes and solicit industry support
- Drafting language for Title 24, Part 6, the Alternative Calculation Method Reference Manual, and related appendices
- Identifying necessary changes to the CBECC-Res and CBECC-Com building simulation tools.
- Summarizing the above-mentioned research and analysis in a public-facing CASE Report

TRC's multifamily CASE team leverages the experience, data, relationships accrued by our programs team through implementation of multifamily new construction and retrofit programs across the State of California and beyond. We also coordinate with the IOU reach code, compliance improvement, and code readiness teams to share knowledge and align efforts.

County of San Luis Obispo (County)
Zero Net Energy Neighborhood Feasibility Study
California • 2018 – 2019

The County, funded through a California Energy Commission (CEC) grant, wanted to identify a replicable process to convert existing neighborhoods to zero net energy (ZNE) by integrating energy efficiency and conservation, scalable renewable energy generation, and community engagement. Through the grant, the TRC team—comprised of TRC, NREL, and Calthorpe Analytics—assessed the Oceano Study Area, the first such existing community in San Luis Obispo County. We determined the feasibility of converting the area into a ZNE neighborhood. To accomplish this task, the TRC team developed a ZNE neighborhood feasibility, design, and implementation plan that incorporated existing neighborhood conditions and energy profile, energy efficiency and conservation potential, and distributed energy conservation potential. As part of this project, TRC conducted an energy and billing analysis and community outreach and engagement, as well as developed a tool to assess ZNE potential that leverages existing and proposed programmatic approaches to achieve those goals for the community.



Years of Experience: 12

Farhad Farahmand

Senior Project Manager

Farhad Farahmand is a project manager with experience serving a variety of roles related to energy and sustainable development. Mr. Farahmand has a history as a mechanical design engineer developing high performance buildings. At TRC he has conducted cost-effectiveness analyses for reach codes across California, including electrification and zero net energy (ZNE) codes, to support jurisdictional climate action plans. He has deep experience in stakeholder engagement, engineering analysis, and technical policymaking.

EDUCATION

M.S. Public Policy and Management

Carnegie Mellon University

B.S. Mechanical Engineering

University of California, Berkeley

CERTIFICATIONS

- Professional Engineer, (CA #M35135), 2010
- USGBC LEED Accredited Professional, 2008

CONTACT

ffarahmand@trccompanies.com

RELEVANT EXPERIENCE

TRC I Project Manager, Codes and Standards Development

Mr. Farahmand leads cost-effectiveness analysis and stakeholder outreach focusing on energy efficiency, resiliency, and electrification. Mr. Farahmand played an integral part in the adoption of dozens of electrification reach codes adopted across California in 2019-2021 by developing the cost-effectiveness analysis and model codes and presenting at staff meetings, community events, and Council hearings. Mr. Farahmand led a ZNE neighborhood design and feasibility study for an economically disadvantaged neighborhood in San Luis Obispo County, formulating pathways for achieving ZNE and improved resiliency while considering a complex and interdependent set of socioeconomic, technology, infrastructure, ownership, management, and regulatory considerations.

He authored several codes and standards enhancement reports for Title 24 improvements, including high-performance envelope and economizer-related measures. He has analyzed and supported the market transformation of several emerging technologies (e.g., building retrofits integrating high performance control sequences, advanced lighting controls, and fault detection and diagnostics).

Carnegie Mellon University I Masters Student

Mr. Farahmand led an econometric study measuring the impact of community gardening on housing prices in Pittsburgh, Pennsylvania. Mr. Farahmand was part of the "best proposal" team at the U.S. Department of Energy Better Building Case Competition for developing an energy and water sustainability plan.

OTHER EXPERIENCE

Timmons Design Engineer I Mechanical Engineer

Mr. Farahmand managed the development of efficient mechanical, electrical, and plumbing designs at Timmons by coordinating with architects, budgeting labor, and delivering deadlines. He led the HVAC design for a wide range of building types, and helped conceptualize sustainability master plans for large scale developments.





Julianna Yun Wei

Technical Project Manager

Julianna Wei’s focus areas are DER deployment, building efficiency and electrification, and policy development. Building on her analytical background and affinity to build partnerships, she excels at connecting the technical and business worlds.

Years of Experience: 12

EDUCATION

M.S. Mechanical Engineering,
University of California, Irvine

**B.S. Mechanical Engineering
Emphasis on Energy &
Environment Systems**
University of California, Irvine

CERTIFICATIONS

- Professional Engineer, New York State

CONTACT

ywei@trccompanies.com

RELEVANT EXPERIENCE

California Investor Owned Utilities | Project Manager *Title 24 Residential and Nonres Codes and Standards*

Ms. Wei managed and coordinated the California Title 24 building codes work. She performed analyses to develop minimum code requirements for electrification-enabling heat pump water heaters in multifamily applications, led the initiative and authored a report to implement all HVAC ducts and equipment into conditioned space and other envelope measures to minimize distribution losses. In 2010, she conducted study and authored reports for solar thermal in multifamily buildings and “solar ready” measures that pave the way for CA’s current solar mandates.

Redwood Coast Energy Authority | Project Manager *Redwood Coast Airport Microgrid*

Ms. Wei leads the business case evaluation and market replication assessment for a resiliency driven, multi-customer microgrid that will support the regional airport and coast guard air station. She manages the business modeling exercises and tasks of quantifying resiliency values of critical facilities with emergency-response capabilities. The project investigates how grid interruptions – with increasing frequency and severity – impact microgrid designs and identifies market barriers for front-of-the-meter assets and strategies to overcome them.

Peninsula Clean Energy | Research Lead *Policy and Financing Mechanisms – Existing Building Electrification and EV Charging*

Ms. Wei compiles research to highlight policy and financing options available to local governments to immediately encourage or indirectly influence the transition to building and transportation electrification. The report identifies implementation tools, mechanisms, gaps, and recommendations for future programs.

New York State Energy Research and Development Authority (NYSERDA) | Senior PM – Clean Energy Siting

Ms. Wei led local government engagement on development topics for solar, wind, and battery storage to meet the state’s renewable goals. She synthesized materials to develop best practices Solar Guidebook and Storage Guidebook, covering land use and zoning, tax strategies, and landfill/brownfield sites.



