Presented by



Connecting the Dots to the Future Clean Energy Workforce

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Southern California Edison

Southern California Edison (SCE) One of the Nation's Largest Electric Utilities



• 50k+ square-mile service area across southern, central and coastal California

ETCC ENERGY TRANSITION

- 15 million residents and 5 million customer accounts in SCE service area
- 118k+ miles of SCE electric lines (distribution, subtransmission and transmission lines)
- 1.4 million power poles
- 724k transformers
- ~800 SCE substations
- ~\$6 billion capital investments annually in a safe, reliable clean energy grid

Southern California Edison's Pathway 2045 and Countdown to 2045

California's climate goals include a 40% reduction in greenhouse gas (GHG) emissions from 1990 levels by 2030, and 80% by 2050, as well as net-zero GHG emissions economy-wide by 2045.

Pathway 2045 (2019)

SCE's 2019 data-driven analysis of the steps that California must take to meet the 2045 goals to clean our electric grid and reach carbon neutrality.

Reimagining the Grid (2020)

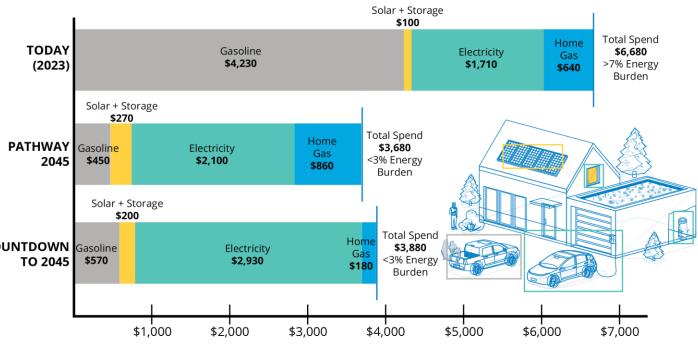
Assessment of grid changes needed to support GHG reduction goals, while adapting to evolving customer (EV, DERs) and climate-change driven needs.

Mind the Gap (2021)

Assessment of policy changes and additions needed to ensure California meets its GHG emissions reductions targets by 2030 in anticipation of its goal to decarbonize by 2045.

<u>Countdown to 2045</u> (2023)

Data-driven analysis of the steps that California must take to meet 2045 goals, which identified 5 key actions for affordably achieving carbon neutrality.



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Connecting the Dots: SCE Energy Education Centers

SCE's Energy Education Centers are located in Irwindale and Tulare and provide education opportunities that enable individuals to make informed decisions about energy usage, equipment, and technology for their homes and businesses.

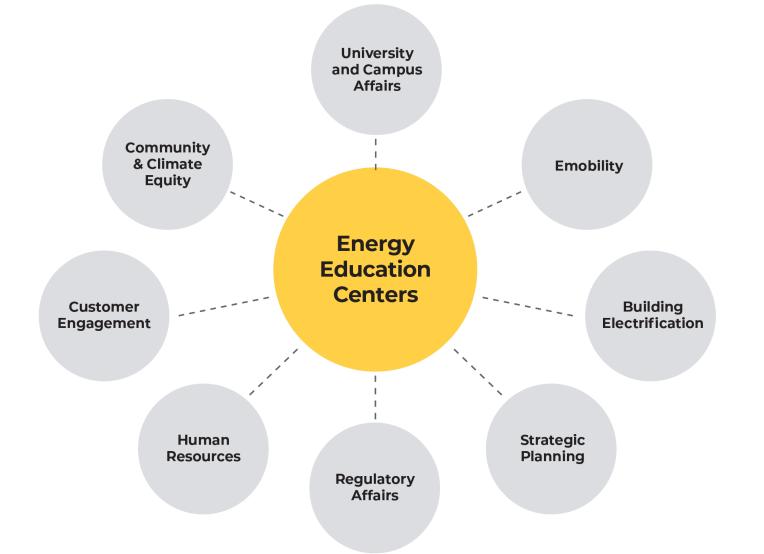
Courses and workshops cover basic to advanced topics:

- Building and Energy Efficiency: HVAC/R, Home & Building Performance, Energy Codes & Standards, Lighting
- Renewable Energy & Sustainability: Renewable Energy, Building and Vehicle Electrification, Decarbonization
- Specialized Fields: Agriculture, Pumps & Water Delivery, Foodservice





Connecting the Dots: Leveraging a Cross-Functional Framework of Teams



- The Workforce Development committee was formed to gather information, catalog projects, and identify programs across key Southern California Edison units for the initiative.
- These key committee members collaborate with communities, organizations/CBOs, and energy-related businesses to gather stakeholder input.
- This strategy strengthens SCE's leadership in driving the clean energy workforce.

A Clean Energy Workforce is Key to Meeting SCE's Guiding Principles

Reskilling and Upskilling:



Ongoing training is key to equip workers with digital, data analysis, and cybersecurity skills, easing transitions to renewable energy roles.



Inclusive Workforce Development:

Focus on career paths for low-income and underrepresented groups through targeted training, apprenticeships, and educational partnerships.

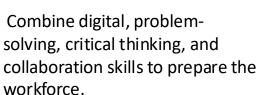
Support for Transitioning Workers:



Essential support includes financial aid, career counseling, and job placement for those moving from fossil fuels to renewables.

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Technical and Human Skills:





Digital Transformation:

Utilize pandemic-driven digital shifts to streamline and adapt work processes for new energy technologies.



Policy and Investment:

Governments and organizations should back decarbonization with investments in infrastructure, zero-emission vehicles, and renewable energy.

https://innovation.luskin.ucla.edu/environmental-equity/workforce-impacts-of-decarbonization/

<u>htps://www2.deloitte.com/us/en/insights/industry/power-and-utilities/decarbonization-strategy-power-workforce.html</u>

Connecting the Dots: SCE's Clean Energy Workforce Development Initiative

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Designed to complement the resources featured at **SCE Energy Education Centers**, SCE aims to facilitate connections and empower emerging clean energy professionals and ensure sustainable and equitable expansion of the clean energy job market.



Launched in 2022, the **Clean Energy Workforce Development Initiative** represents SCE's strategic response to the recognized need for greater visibility and collaboration across clean energy workforce projects across SCE.



Out of this initiative, the **Clean Energy Career Resources** project was established in recognition of the critical demand for a robust workforce capable of advancing the clean energy jobs transition with substantial support, education, and training opportunities for those seeking careers in the sector.

Connecting The Dots: Executing Three Key Objectives

Expand Internal Collaboration, Content and Reach

We are dedicated to expanding and enriching the curriculum and information provided at our Energy Education Centers. Promoting these classes to a wider audience ensures that clean energy professionals have access to the latest knowledge and skills.



Promote Projects to External Stakeholders

We document our initiatives to highlight success stories and showcase the progress and impact of our work. Promoting these stories externally inspires, informs, and encourages collaboration between stakeholders and the public.



Advocating for clean energy is central to our mission. We support policies and community efforts for a greener future, aiming to strengthen SCE's credibility and establish our leadership in clean energy education and workforce development.

Connecting the Dots: Increase Content and Optimize Collaboration

- Focus on key audiences of high school and college students and career-changing professionals.
- Share information with community-based organizations (CBOs), business groups, government, and educational institutions.
- Leverage digital marketing, social media, video, podcasts to expand audience engagement.
- Optimize online information, apply SEO, track web traffic, referral sources, and monitor visitor behavior to match user needs.
- Gather research, information, and current and new stakeholder feedback to enhance content.



Connecting the Dots to the Future of Clean Energy Education and Career Opportunities

SCE Clean Energy Career Resources



California's goals for 2030 and 2045 to reduce greenhouse gas emissions have created a significant number of new clean energy jobs, particularly in high-road positions that offer good wages, benefits, and opportunities for career advancement and are crucial for fostering equitable economic development in historically underrepresented, disadvantaged communities.

SCE's Clean Energy Career Resources expands the offerings of the Energy Education Centers by focusing on three key strategic pillars:

SCE Internal Career Initiatives

SCE trains and educates its workforce and other industry professionals in its territory through its Energy Education Centers (EECs), scholarships, and career information and pipelines.

- Energy Education Centers Located in Irwindale and Tulare California, offering free classes, workshops, and consultations on clean energy technologies and more.
- Grants, Scholarships, and Financial Support [7]^a Discover SCE grants, scholarships, and financial support for advancing education and careers in clean energy.
- <u>Clean Energy Career Resources</u> Learn more about SCE's efforts to empower the next generation of clean energy professionals.

External Education and Training

SCE supports education through strategic partnerships with trade schools, community colleges, and philanthropic investments, all of which aim to enhance job opportunities in the energy sector, including non-SCE roles.

Career Technical Education (CTE) - Supports workforce accreditation through select California Community Colleges.

Trade Schools - Engages in enhanced partnerships with trade schools to expand their s, course offerings in clean energy subjects, equipping students with practical skills and knowledge for the evolving energy industry. E Strategic Investments - Focuses on non-degree

opportunities for electricians, carpenters, EV

Industry Collaboration and Advocacy

SCE collaborates with industry and government to support the creation of clean energy jobs. Utility Collaboration - Works with public agencies to influence federal infrastructure spending in areas including cybersecurity and renewable energy.

Workforce Advocacy - Engages in legislative affairs to support clean energy workforce policies.

Industry Research - Monitors news, academic, and governmental studies to stay on top of trends and predict job growth opportunities. Reports on programs, organizations, and trends that align with and advance clean energy career

This initiative complements the Energy Education Centers programs and furthers SCE's commitment to clean energy education and career development.

service technicians, and more. See the

investment list here.

Contact: SCECleanEnergyWorkforceDevelopment@sce.com

Connecting the Dots: Clean Energy Career Resources

- Central to the initiative's success are Southern California Edison's dedicated workforce webpages
- These pages serve as centralized hubs of information for jobseekers and career candidates interested in the clean energy industry.
- <u>SCE Clean Energy Workforce Development</u> <u>Programs and Resources</u>









Thank You!

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