

Central New Mexico Workforce Analysis

Prepared for: The Central New Mexico Comprehensive Climate Action Plan

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CONTENTS

INTRODUCTION 3

- Priority Jobs 3
- Historic and Projected Growth 4
- Gaps and Shortages 4
- Impact on Existing Jobs and Industries 5

WORKFORCE DEVELOPMENT EFFORTS 5

- Energy Efficiency 5
- Renewable Energy 6
- Energy Storage and Grid Modernization 6
- Clean Fuel Vehicles 7

GENERAL JOB TRAINING AND WORKFORCE SUPPORT 7

- State-Led Programs 7
- Regional Programs 8
- LIDAC Impact 8

CONCLUSION 8

INTRODUCTION

The workforce planning analysis conducted for the Central New Mexico Comprehensive Climate Action Plan (CCAP) process revealed a rapidly growing clean energy workforce, a rich ecosystem of local, regional, and state education and workforce development efforts, and a deep economic history in the energy industry on which to build the workforce of tomorrow.

In recognition of the ongoing state-level work to analyze and project clean energy job growth, the Albuquerque Metropolitan Statistical Area (MSA) project team decided to forgo a potentially duplicative effort. Instead, this analysis focuses on a qualitative assessment of existing research, as well as on bridging a gap identified through stakeholder engagement: the dearth of coordination across the multitude of workforce development efforts. Widely accepted gold-standard data analyses, workforce development reports, and informational interviews conducted with key stakeholders in workforce development were synthesized to present the potential implications of the CCAP, particularly for low-income, disadvantaged communities (LIDACs), on Central New Mexico's clean energy workforce.

Priority Jobs

The landscape review of the workforce development efforts revealed that creating high-quality careers for the Albuquerque MSA is in itself a goal of the CCAP measures. While the Albuquerque MSA economy boasts multiple major industries, the region still seeks to diversify and ensure economic sustainability against a flattening population curve, particularly for its rural areas. Both the region and the State recognize the importance of developing its abundant natural renewable resources in service of both climate pollution reduction and meaningful job creation.

A comprehensive analysis of the clean energy workforce in New Mexico suggests there are many and varied priority jobs needed to support the expansion of clean energy and the achievement of New Mexico's climate goals. These occupations cover the spectrum of energy project needs, from project management to purchasing to design to installation, encompassing different educational attainment and training levels. Below is an initial list of occupations needed to implement the CCAP measures:

- Accountants and auditors
- Buyers and purchasing agents
- Civil engineers
- Construction and building inspectors
- Construction managers
- Electricians
- Energy auditors
- Energy storage technicians
- General and operational managers

DESIGN PHASES



- Geothermal engineers
- HVAC technicians
- Hybrid and electric vehicle technicians
- Plumbers, pipefitters, and steamfitters
- Project management specialists
- Solar photovoltaic installers
- Transmission line installers and repairers
- Wind turbine installers and service technicians

Table 1. Job Codes Required for CCAP Measures.

Measure	US Bureau of Labor Statistics (BLS) Job Code
Develop EV infrastructure	Electricians (47-2111) Automotive Service Technicians and Mechanics (49-3023)
Improve energy efficiency, weatherization and electrify existing buildings	Electricians (47-2111) Heating, Air Conditioning, and Refrigeration Mechanics and Installers (49-9021) Insulation Workers, Floor, Ceiling, and Wall (47-2131) Insulation Workers, Mechanical (47-2132) Construction Laborers (47-2061)
Increase deployment of distributed renewables and develop microgrids	Electrical Engineers (17-2071) Electricians (47-2111) Electrical and Electronics Repairers, Powerhouse, Substation, and Relay (49-2095)
Develop energy storage systems	Electrical Engineers (17-2071) Electricians (47-2111) Electrical and Electronics Repairers, Powerhouse, Substation, and Relay (49-2095)
Develop transmission and distribution infrastructure	Electrical Engineers (17-2071) Electrical and Electronics Repairers, Powerhouse, Substation, and Relay (49-2095) Electrical Power-Line Installers and Repairers (49-9051)

Historic and Projected Growth

Industry-leading analyses of the nation’s clean energy workforce all underscore New Mexico’s leadership in expanding its clean energy jobs and the state’s strong projected future growth. The state has grown its number of clean energy jobs by over 21% since 2020, boasting the third-highest growth rate (6%) from 2023 to 2024 in the nation.

In 2025, clean energy jobs accounted for between 13,250 and 13,460 jobs in New Mexico, depending on how and what jobs are counted. Almost half of those jobs were in the energy efficiency subsector, and over one-third were in the renewable energy subsector. The New Mexican energy efficiency subsector demonstrated the fastest year-over-year growth among all states at 7% in 2024. Notably, clean vehicle jobs grew far faster than traditional internal combustion vehicle jobs.

Another analysis found the most job openings available for electric line installation and repairs, followed by wind turbine service technicians, and thirdly, general and operations managers. The analysis also reported the strongest predicted growth in solar photovoltaics installers, followed by wind turbine service technicians. Finally, the state is beginning to track the new economy sectors, noting in its Workforce Innovation and Opportunity Act report the number of job

postings for energy transition workers (109 in July of 2023), climate resilience workers (189 in July of 2023), and sustainable and value-add agriculture workers (372 in July of 2023).

Ultimately, these clean energy jobs are expected to continue the demonstrated strong growth, particularly with the implementation of the CCAP.

Gaps and Shortages

A commonly noted and major gap identified in the stakeholder interviews was in energy auditors; the state may be hindered in its ability to meet climate goals due to the severity of this shortage.

Additionally, although growth continues, the energy efficiency subsector is still experiencing shortages in HVAC technicians, particularly those experienced with residential heat pumps. This is a complex gap to fill because interviewees have noted the more lucrative nature of commercial HVAC jobs often lures contractors away from the residential space.

Furthermore, wages may not adequately incentivize the recruitment of a new workforce. Although Albuquerque's cost of living is lower than the national average, the average wages for many of the technician jobs still may not pay the area living wages for one adult and one child, considered best practice.

Albuquerque is well-positioned with a strong clean energy resources potential and the industry infrastructure to capitalize. This also suggests that workforce recruitment across the field, from engineering to management to installation, will continue to play a major role in ensuring the region can actualize the projected growth.

Impact on Existing Jobs and Industries

New Mexico signed the Energy Transition Act into law in 2019, ushering in the State's first renewable energy targets and landmark effort to move an economy driven significantly by oil and gas to one that leverages its abundant clean energy resources. As such, a decline in certain existing jobs and industries, and an explosion in others, has been forecasted since this legislation. The Energy Transition Act provides funds to workers displaced from oil and gas jobs and opportunities to reskill into the clean energy economy.

The opportunities in the clean energy industry vary in location and offer rural areas the chance to diversify their economies and bring in new sources of income. This may hinge to some degree on the ability for workforce development solutions to reach rural community members who could be interested in such jobs.

WORKFORCE DEVELOPMENT EFFORTS

Given the legislative mandate, New Mexico boasts a multitude of ongoing and early-stage workforce development initiatives and programs at the state, regional, and local levels. Many of these programs focus on reaching rural, low-income, tribal, and other equity-priority communities, in alignment with the CCAP goals. Such workforce development activities seek to ensure all New Mexicans benefit from the energy transition and from the investments into this new, burgeoning economy. The subsections below identify critical partnerships and initiatives by

job type that bolster the Albuquerque MSA's CCAP goals and illustrate the MSA's opportunity to amplify existing efforts and join collaboratives rather than add new programming.

Energy Efficiency

The New Mexico Department of Workforce Solutions (DWS) is piloting a workforce development program in conjunction with the Temporary Assistance for Needy Families (TANF) program, which administers Supplemental Nutrition Assistance Program (SNAP) benefits. The Building, Energizing, and Connecting through Apprenticeships (BECA) program will provide TANF recipients with assistance for job training and stipends for those entering infrastructure and clean energy jobs. BECA builds on New Mexico's current apprenticeship and pre-apprenticeship system and helps new contractors start and operate apprenticeships. In service of one of its core goals of bringing opportunities to underrepresented groups, the program will also extend support for community-based organizations and nonprofits that provide critical wraparound services to reduce barriers to employment, such as childcare.

Northern New Mexico Workforce Integration Network offers a mobile training program funded by the US Economic Development Agency's Good Jobs Challenge grant. This unique opportunity bridges accessibility gaps in rural and tribal areas by providing skilled trades and special construction projects training via a custom camper bus. Innovative in approach and technologies utilized, the mobile training unit program also exemplifies the power of collaboration, uniting three local community colleges, two UNM satellite campuses, the New Mexico Higher Education Department, and six industry associations and skilled trades unions.

New Mexico Manufacturing Extension Partnership (MEP) collaborates with the Energy Efficiency Center at Arizona State University and the Industrial Assessment Center at New Mexico State University to provide free technical assistance, energy efficiency workshops, energy audits, and associated free or reduced cost efficiency improvements to manufacturers, major facilities, and businesses. While providing this free service, the universities recruit and train students and community members to conduct assessments and learn to work with facilities. The universities are also supporting union-led and community college-led workforce development initiatives.

The New Mexico Center for Economic Opportunity (NMCEO) collaborates with the DWS to administer the Be Pro Be Proud New Mexico program. This program advertises career opportunities in skilled trades with young people through simulators and virtual reality experiences, using a custom-built, mobile workshop.

Finally, Goodwill Industries of New Mexico and Accenture have partnered to create the Clean Tech Accelerator to reach underemployed populations and provide them with "accessible, tailored training pathways" to clean energy jobs. The program seeks to build relationships with employers as well as private and public funders. One major focus is training and certifying heat pump technicians, in partnership with Bloc Power.

Renewable Energy

The City of Albuquerque's Economic Development Department hosts their own workforce development program, Job Training Albuquerque (JTA). JTA offers a robust suite of solar

trainings, including: Solar NABCEP Associate Exam Preparation, Solar Electric Basics, Solar Basics Exam, and Solar (PV) and the National Electric Code (NEC). Also locally, the Albuquerque Regional Economic Alliance (AREA) seeks to establish Albuquerque as a national leader in “green” energy and supports efforts to bring employers to the City.

Community and technical colleges provide critical infrastructure for training and credentialing in clean energy jobs. Two-year institutions offer leading technical training for all aspects of the clean energy economy, from solar and renewable energy installation to biofuels and other emerging subindustries. For example, Mesalands Community College boasts a nation-leading program training wind turbine technicians.

At the State level, New Mexico Department of Energy, Minerals, and Natural Resources (EMNRD) is spearheading an effort to coordinate partners in the renewable energy workforce sector called the Workers Alliance for Green Energy (WAGE). WAGE supports utility-scale solar and wind energy generation projects. Additionally, similar to AREA’s local efforts, the New Mexico Economic Development Department (EDD) has also helped recruit major solar energy companies to move their operations to New Mexico, including Ebon Solar, LLC and Maxeon Solar Technologies.

Also on the private side, Goodwill Industries of New Mexico’s workforce development program includes development of a solar energy technician pathway in partnership with GRID Alternatives.

Energy Storage and Grid Modernization

One of the region’s major ongoing initiatives is the San Juan Energized Watershed program, led by the University of New Mexico (UNM). The partnership would create and promote dual enrollment work-based learning and youth apprenticeship programs to build stronger pathways for unemployed or underemployed adult workers to transition into new careers in two sectors critical to the sustainability of the region, water and energy.

Again, collaboration across the ecosystem of New Mexican colleges and universities plays a critical role in advancing this sector of jobs. As a current collaborator of the Energized Watershed project, Navajo Technical University exemplifies the opportunity for the energy transition to benefit tribal communities, with 94% of enrollees identifying as indigenous. Additionally, Santa Fe Community College offers one of the only training programs for microgrids and smart grid technology in the country.

Workforce Connections of Central New Mexico (WCCNM) serves as the regional hub that administers and delivers the various services and resources from a State workforce program, the New Mexico Workforce Connection. In September 2023, WCCNM won a five-year US Department of Labor development grant to leverage established, existing partnerships that help lower barriers to high-quality jobs in critical infrastructure sectors.

The Goodwill and Accenture Clean Tech Accelerator training program includes a pathway for clean energy storage technicians in partnership with GRID Alternatives.

Clean Fuel Vehicles

Locally, the City is spearheading the clean vehicle workforce development. JTA provides training courses on Electric Vehicle Fundamentals for auto repair shop employees. Similarly, San Juan College has been developing a center of excellence to train the next generation of workers in hydrogen power and lithium ion battery recycling, and electric vehicle (EV) technicians. The final career pathway that the Accenture and Goodwill Industries Clean Tech Accelerator is developing is training and certifications for electric vehicle supply equipment technicians, in collaboration with ChargerHelp!.

GENERAL JOB TRAINING AND WORKFORCE SUPPORT

State-Led Programs

Funded by the federal Workforce Innovations and Opportunities Act (WIOA), the EDD's Job Training Incentive Program (JTIP) collaborates with regional workforce development centers to customize training on newly-created qualifying jobs for companies expanding operations in or relocating to New Mexico. The three DWS workforce development centers in the Albuquerque MSA offer a range of services for employers, such as applicant prescreening calls, recruitment, on-the-job training, and provision of labor market information.

The State also collaborates with several public higher education institutions to advance their workforce development goals. UNM's continuing education program works with companies to build training courses specific to the company's requirements and consults for businesses and employers on training development and organizational solutions.

At the high school level, the State's Education Department funds the New Mexico Mathematics, Engineering, and Science Achievement (MESA) program, which seeks to prepare high school-aged students from across the state for college and careers in technical fields.

Finally, there is a major cross-departmental initiative at the State to align on clean energy and infrastructure workforce development programs across agencies. Each department will provide quarterly reports on workforce funding, programs, and progress. The Climate Bureau, which is leading the State's CCAP process, is also convening key stakeholders across departments to ensure a collaborative planning and implementation process.

Regional Programs

Workforce Connection of Central New Mexico (WCCNM), the regional workforce board, seeks to serve as a one-stop-shop to employment, providing a range of employment and training services from work-based learning opportunities to occupational training and career services. Actionability is the core focus for WCCNM, offering training attached to stackable credentials, apprenticeship programs, and information and guidance on career pathways. The apprenticeship team works to build out and promote apprenticeship models to businesses and participants interested in apprenticeships. Similarly, the Central New Mexico Community College (CNM) hosts a workforce training center, Ingenuity, where they work with employers to customize workshops, courses, and training materials.

Santa Fe Community College serves as a major workforce training and development provider for the region. The school hosts the Smart Energy Academy, a nationally-recognized and accredited green jobs training center with a variety of certification programs for residential and commercial energy and water efficiency jobs. This periodically includes retraining programs targeted at individuals who are unemployed, underemployed, and/or low-income. Such priority individuals are offered travel stipends to facilitate attendance and assistance with job placement.

The region's utilities also provide training for line workers and journeymen, such as PNM's Power Pros program. In partnership with IBEW Local Union 611, PNM is recruiting high school students for its groundbreaking program that combines hands-on training and classroom instruction to prepare the next generation energy workforce. Their apprenticeship offerings extend to other related careers such as relay, meter, and substation electrical technicians.

LIDAC Impact

The vast majority of workforce development programs at all levels of government and in private industry are intended and designed to reach low-income and disadvantaged community members. A few programs and their specific equity-priority benefits are shared below.

Individuals with Disabilities: Dona Ana Community College offers a career and life skills academy that engages adults with disabilities and works with students to create a blueprint to employment.

Justice-Involved Individuals: Recently, the Dona Ana Community College academy has begun efforts to expand its purview to reach individuals facing other barriers, such as justice-involved individuals. Similarly, in June 2022, WCCNM received a federal grant (Pathway Home Reentry Employment Opportunity, or CHANCES) to provide recently justice-involved individuals with pre-release job readiness and occupational training.

Tribal Communities: The City of Albuquerque sought to build stronger relationships with the Jicarilla Apache Nation and in 2019 purchased 25 megawatts of new solar energy to support clean energy jobs for the tribe. Additionally, Navajo Technical University has been included in several workforce development programs, notably including the San Juan Energized Watershed effort, and plays a critical role in making these initiatives accessible to indigenous students.

Energy Transition Workers: DWS, EDD, and UNM obtained a US Department of Energy Just Transition grant to collaborate on advancing the State's clean energy workforce and support workers transitioning away from the fossil fuel industry.

CONCLUSION

The Albuquerque MSA's clean energy and transportation economic sectors are expanding and the number of clean energy jobs has rapidly grown to reflect this development.

To achieve the MSA's CCAP goals, the region must take advantage of this planning process as a critical opportunity to align across the State's many workforce development efforts and establish a shared approach with the full ecosystem of training and implementation partners. Doing so will reduce confusion for job seekers, streamline messaging to the public, and improve

job training services to the community by eliminating duplicative efforts. There are already abundant resources currently dedicated towards workforce development in the State; what will change as a result of the CCAP is better coordination and leveraging of those efforts to deliver the best possible training and experience for the Albuquerque community. Additional information on the Workforce Analysis can be found at <https://www.resilientfuturesnm.org/> or <https://www.cabq.gov/sustainability/regional-planning-efforts>.

Table 2. Existing Workforce Programs and Resources.

Type	Program	Agency
Funding - Federal	Workforce Innovation and Opportunity Act	U.S. Department of Labor
Funding - Federal	Good Jobs Challenge	U.S. Development Administration
Funding - Federal	Apprenticeship Building America Grants	U.S. Department of Labor
Funding - Federal	Innovative Water Infrastructure Workforce Development Program	U.S Environmental Protection Agency
Funding - Federal	Brownfields Job Training Grants	U.S Environmental Protection Agency
Certification	Solar Energy Training Programs	North American Board of Certified Energy Practitioners
Certification	Renewable Energy Training Programs	Solar Energy International
Job Training	EV Supply Equipment Training Programs	Electric Vehicle Infrastructure Training Program
Certification	Facility Management Professional credentials	International Facility Management Association
Job Training	EVSE Technician Training Programs	ChargerHelp!
Certification	Certified Energy Manager Certificate	Association of Engineers
Training Provider	EV, Solar, and HVAC Training Programs	ImmerseLearn
Tool	Energy Star Portfolio Manager	U.S Environmental Protection Agency
Tool	Environmental Compliance Basics	360 Training
Certification	Certified Energy Auditors	Association of Engineers
Certification	Data Analysis Certificates	Coursera, edX, Tableau
Training Provider	Custom Training Program	University of New Mexico Continuing Education
Certification	Wind Turbine Technician Training Program	Mesalands Community College
Certification	Energy Smart Academy	Santa Fe Community College

Certification	EV Technician Training Program	San Juan College
Certification	School of Energy Center of Excellence	San Juan College
Job Training	Career and Life Skills Academy	Dona Ana Community College
Job Training	Job Training ABQ	City of Albuquerque Economic Development Department
Job Training	Clean Tech (Solar Installation and HVAC/Heatpump Installation)	Goodwill Industries of New Mexico
Job Training	PNM Power Pros	Public Service Company of New Mexico, Local International Brotherhood of Electrical Workers 611
Job Training	Energywise auditor program	Homewise
Job Training	Rewiring America Electric Coach	Rewiring America
Green Workforce Policy Library	Workforce Dashboard	C40 Cities
Job Training	Quick Saver Contractor Training	Public Service Company of New Mexico
Certification	Electrical Trades Solar Certificate	Central New Mexico Community College
Certification	Electric Vehicle Technology	Central New Mexico Community College
Green Job Board	So You Want to Work in Climate	Nicole Kelner
Workforce Report	New Mexico Workforce Pathways Exchange Prospectus	Coalitions & Collaboratives
Workforce Report	Clean Jobs New Mexico	E2
Workforce Report	State of New Mexico Climate Action Plan (page 345)	State of New Mexico