

COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGY
**ASSOCIATION OF CENTRAL
OKLAHOMA GOVERNMENTS**
NEW ELECTRIC ENERGY WORKFORCE INDUSTRY PLAN
APRIL 2022

CONTENTS

Introduction	1
Executive Summary	2
Planning Context	3
Economy Overview	3
Workforce Analysis	6
Target Industry Analysis	6
Stakeholder Engagement Roundtable Outcomes	8
Regional One-on-one Interview Outcomes	8
Leadership Workshop Sessions	9
Vision, Goals and Guiding Principles	10
Goals and Strategies	10
Pillar 1: Modern Energy Employer Leadership & Advocacy	10
Pillar 2: Real-Time Data Tracking	11
Pillar 3: Talent Pipeline (K-Gray)	12
Pillar 4: Existing Workforce Transitions (Adult Workers)	14
Pillar 5: Platform for Advancement – Modern Energy Hub of Innovation	16
Implementation Recommendations	18
Business Growth and Recruitment	18
Workforce Development	18
Talent Attraction	18
Equity and Diversity	18
Innovation (Business Adaption)	18
Agility (Partnerships and Collaboration and Policy Responsiveness)	19
Leadership Symposium	19
Funding Scan and Resources	19
U.S. Department of Energy - November 9, 2021	19
Investing in American Manufacturing and Workers	19
Delivering Reliable, Clean, and Affordable Power to More Americans	19
Building the Technologies of Tomorrow Through Clean Energy Demonstrations	20
U.S. Economic Development Administration (EDA)	21
Central Oklahoma	24
Oklahoma Department of Education	25
Conclusion	26
Acknowledgements	27

LIST OF TABLES & FIGURES

Table 1.....	4
Table 2.....	5
Table 3.....	6, 7
Table 4.....	11
Table 5.....	12
Table 6.....	13
Table 7.....	14, 15
Table 8.....	16, 17
Figure 1.....	3
Figure 2.....	3
Figure 3.....	6
Figure 4.....	9

INTRODUCTION

This plan is a call to action – bold and immediate action! The plan was created by the Association of Central Oklahoma Governments (ACOG) as Oklahoma, and the nation, stand at the intersection of two powerful forces that are reshaping the economic landscape. This plan encompasses the future of Modern Energy and applies to the ACOG region (Logan, Cleveland, Oklahoma, and Canadian Counties) and the entire Oklahoma City metropolitan area. With the planning phase concluded, Oklahoma stands ready to push forward and embrace the new era of modern energy.

The first force is the rapidly accelerating movement from fossil fuels to renewable energy sources brought about by government mandates and incentives, and by consumer choices in the marketplace. This is impacting both employers and employees in a wide range of industries and occupations including electric vehicles, oil and gas extraction and transmission, residential and commercial construction, and many others. Much like information technology (IT), the impacts will be felt across all industry sectors.

The second force is the changing nature of the workforce, with pre-COVID trends now being accelerated by the experiences of the past pandemic year. Current and emerging workers now have more leverage as they search for higher wages, better benefits, more flexible work arrangements, and more meaningful work.

Both forces are likely to remain powerful in the short term. The states and regions that find innovative ways to seize the opportunities that exist at the intersection of these forces will be the ones that emerge in stronger positions than their peers. Oklahoma, the ACOG region, and the Oklahoma City Metro area, are well positioned to be one of the winners in the new clean energy economy and the “new normal” that has been shaped by the pandemic. Central Oklahoma must not only move fast, but must move more expeditiously than other regions in the country

as others are seeing the same trends and responding in ways unique to each region. Central Oklahoma is fortunate to have a foundation that has been laid that enables quick and decisive actions.

That foundation includes:

- The ACOG 2019 Comprehensive Economic Development Strategy (CEDS) plan that prioritizes Modern Energy;
- The ACOG 2021 CEDS COVID-updated plan which places additional emphasis on innovative partnerships between business and education, as well as cross-training and upskilling the workforce;
- Recent announcements by electric vehicle manufacturers for investment in Oklahoma; and
- Recognition as the No. 1 electric vehicle-friendly state by a national electric vehicle publication.

This Workforce Strategy Plan is crucial in achieving the following goals that will keep Central Oklahoma in a leadership position related to Modern Energy: The ACOG 2019 CEDS plan that prioritizes Modern Energy;

- Promoting and advancing interest in modern energy, particularly in battery technology development, refurbishment, recycling, repurposing, and re-manufacturing;
- Enhancing the visibility of educational programs across our region that can help students develop transferable skill sets;
- Supporting a pipeline of potential local employees from both the current workforce and the emerging workforce;
- Securing partnerships with adjacent industries (i.e., the electric car industry, the oil & gas industry, defense and aviation,

agricultural machinery, etc.) in partnership with educators to form a true innovation cluster;

- Fostering government agility in overcoming workforce deficits and adapting to our “new normal” with preparedness and resiliency to face future uncertainties; and

- Supporting the competitiveness of the industry with smart legislation that incentivizes and enables smart communities.

EXECUTIVE SUMMARY

ACOG is officially designated as the Capital Area Economic Development District (CAPEDD) of Oklahoma by the US Economic Development Administration (EDA). As an intermediary organization, the mission of ACOG is to ensure competitiveness at the national level by leading the local, regionally driven economic development planning process that leverages the involvement of the public, private, and nonprofit sectors and establishes a strategic blueprint for regional collaboration.

Technology holds the potential to address the issue of energy security, and in Oklahoma, we have already noticed the impact of technology on the increasing interest in Electric Vehicles (EV) and electrically operated mass transit, state-funded incentives for home utilizations of solar panels, the exploration of modern energy sources, and the development of battery technology. So that these changes continue in Oklahoma and render the state competitive nationally, this plan will aid ACOG and its partners to prepare and sustain a workforce able to affect technological advancements. Educational institutions alone cannot ensure this because graduates often leave the state.

The industry, by itself, cannot sustain a workforce without support from the community, educational institutions, and local governments. ACOG is uniquely situated as the conduit for such collaboration - especially when partnering with collaborators like OG&E, The Oklahoma Manufacturing Alliance, and Career Tech, to

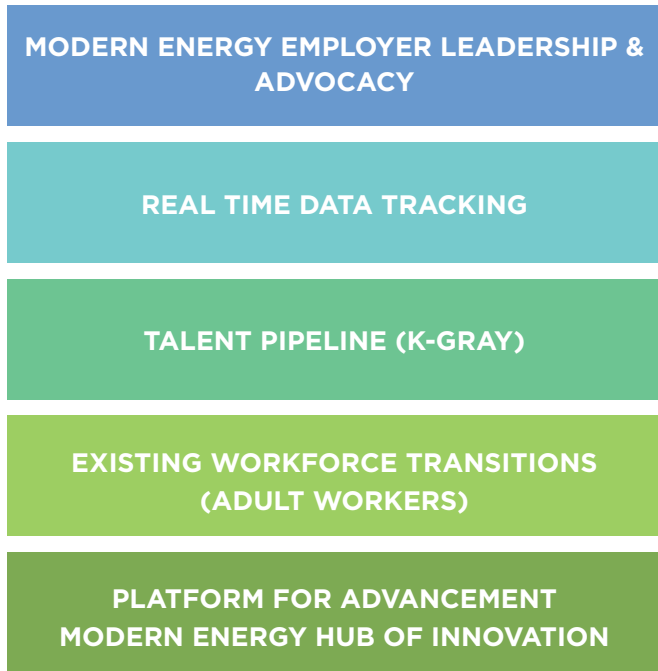
mention only a few. ACOG can facilitate the development of opportunities for a workforce capable to contribute their expertise and sustain competitive energy markets.

This strategic workforce plan focuses on collaboration between all regional entities. ACOG engaged with Thomas P. Miller & Associates (TPMA), a national consulting firm, to complete a workforce labor needs assessment to determine how to best support and develop a new skilled workforce talent pipeline actional plan - a blue print for the region’s growing need for skilled labor within the new modern electric energy industry sector. This workforce plan demonstrates key trends affecting the local labor market and identifies specific industry, workforce and education development opportunities and strategies that are most suitable to meet existing and future industry sector-based needs.

TPMA was tasked with engaging with all regional partners in learning and providing input on how the region could address the development of a skilled workforce, within this new industry sector. This task was performed through a variety of focus groups, one on one interviews, surveys, and strategic planning workshops.

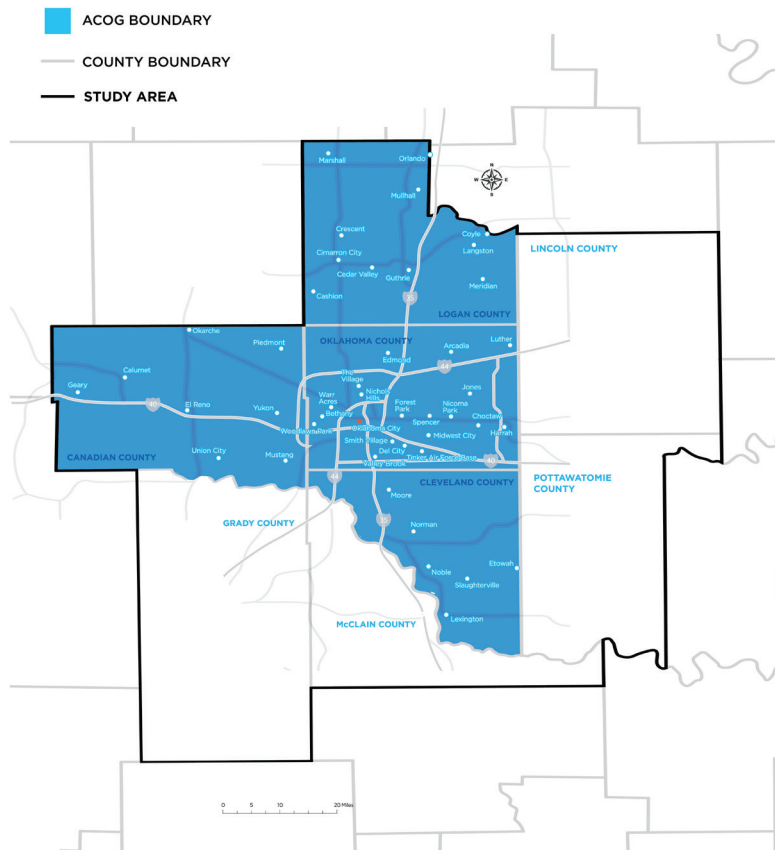
Outcomes of the past eight months of community engagement activities led to the creation of the following five pillar themes which were established and actionable goals were written in support of:

**FIGURE 1:
THE UPDATED CEDS GOALS AT A GLANCE**



This new industry sector workforce strategic plan serves as a roadmap for future development in the ACOG service area in standing up a brand-new industry sector and supporting it with a skilled workforce. It will provide the industry businesses, cities, educators, and public workforce systems along with its community stakeholders a guide that addresses the existing and future labor workforce within their marketplace. Complete findings and detailed descriptions of workforce development actionable items are contained in the full New Modern Electric Energy Workforce Plan.

FIGURE 2: ACOG BOUNDARY



PLANNING CONTEXT

ACOG and TPMA researched and developed a description of the current economic and social environment within the modern energy industry within the Oklahoma City Metropolitan Area. The first step of activities was preparing a current economic analysis, which helped to refresh and gather the new Labor Market Information (LMI) along with, and a workforce analysis for this central region of Oklahoma. This research, coupled with information from the three focus groups and the 15 one-on-one interviews of key regional stakeholders, influenced the plan’s recommendations, priorities, and actionable tasks for the next three years, including the identified needs of employers, education and workforce partners, and community partners across the region. The outcomes of these activities resulted in successfully identifying the relevant workforce gaps, barriers to employment, talent pipelines, and an assessment of new industry workforce needs that formulated this new modern energy electric workforce plan. This refreshed LMI

(Labor Market Information) along with the three focus groups and one on one interviews of key regional stakeholders identified workforce gaps, barriers to employment, talent pipeline and assessment of new industry workforce needs that formulated this New Modern Energy Electric Workforce Plan.

ECONOMY OVERVIEW

As of 2020, the eight county Oklahoma City MSA population had reached 1,425,375 and is expected to continue its growth. Similarly, regional employment has grown by over 2,000 jobs and is projected to grow by another 18,000 jobs through 2026 rapidly. However, the median household income is at \$59,084, below the national average by over \$3,500, as it strives to reach the national median of \$62,843.

Concerning industry growth and projections, the top growing industries in the area are transportation and warehousing, healthcare, government, finance, administrative services, and

TABLE 1: INDUSTRY GROWTH & PROJECTIONS: TOP GROWING INDUSTRY

Industry	2015 Jobs	2020 Jobs	Change in Jobs	% Change in Jobs	2020 LQ	2020 Earnings Per Worker	2020 GRP
Transportation and Warehousing	18,442	29,479	11,038	60%	1.06	\$55,338	\$2,425,307,051
Health Care and Social Assistance	76,384	81,598	5,214	7%	0.91	\$65,177	\$6,341,889,820
Professional, Scientific, and Technical Services	36,191	39,983	3,792	10%	0.85	\$83,631	\$4,672,129,990
Construction	38,647	40,747	2,101	5%	1.02	\$61,157	\$3,518,368,773
Other Services (except Public Administration)	37,001	38,360	1,359	4%	1.08	\$30,696	\$1,667,174,759
Finance and Insurance	26,569	27,857	1,288	5%	0.96	\$89,132	\$5,690,707,699
Educational Services	11,333	12,110	777	7%	0.68	\$42,821	\$608,503,692
Agriculture, Forestry, Fishing and Hunting	2,345	2,953	609	26%	0.35	\$46,335	\$185,613,185
Government	134,755	135,259	504	0%	1.29	\$75,561	\$12,606,307,158
Real Estate and Rental and Leasing	11,007	11,335	329	3%	0.96	\$55,188	\$1,737,836,586
Management of Companies and Enterprises	9,514	9,677	163	2%	0.96	\$114,891	\$1,309,814,745

Top Growing Industry. Source: EMSI 2021

management. Job increases in these industries can be appreciated by considering the growing employer demand in all sectors mentioned in

Table 1—many of these segments are involved in energy, manufacture, and administrative functions.

TABLE 2: CONCENTRATION & COMPETITIVENESS PERTAINING TO ALTERNATIVE FORMS OF ENERGY JOBS:

NAICS	Description	2020 Jobs	2021 Jobs	2026 Jobs	Avg. Earnings Per Job	2020 LQ	2026 LQ	Ind. Mix Effect	Nat'l Growth Effect	Expected Change	Competitive Effect
221114	Solar Electric Power Generation	12	13	17	\$131,334	0.60	0.68	3	0	3	1
221122	Electric Power Distribution	942	960	980	\$137,292	1.01	1.02	(6)	32	25	(5)
238210	Electrical Contractors and Other Wiring Installation Contractors	5,327	5,463	5,820	\$67,726	1.17	1.22	53	179	233	124
333415	Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing	2,511	2,468	2,275	\$64,856	6.50	5.78	(37)	81	45	(237)
335312	Motor and Generator Manufacturing	87	77	46	\$60,207	0.57	0.30	(3)	3	(1)	(31)
336112	Light Truck and Utility Vehicle Manufacturing	20	23	31	\$74,594	0.07	0.10	1	1	1	7
336320	Motor Vehicle Electrical and Electronic Equipment Manufacturing	51	41	17	\$50,510	0.20	0.06	1	1	2	(27)
423120	Motor Vehicle Supplies and New Parts Merchant Wholesalers	646	624	549	\$54,381	0.87	0.77	(37)	21	(16)	(59)
423610	Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant Wholesalers	727	738	756	\$69,947	0.95	0.96	(4)	24	20	(1)
423690	Other Electronic Parts and Equipment Merchant Wholesalers	444	454	477	\$84,611	0.74	0.86	(38)	15	(23)	45
423740	Refrigeration Equipment and Supplies Merchant Wholesalers	61	62	63	\$83,796	0.96	0.90	3	2	5	(4)
811219	Other Electronic and Precision Equipment Repair and Maintenance	296	294	288	\$70,380	1.61	1.42	15	10	25	(32)

Concentration and Competitiveness. Source: EMSI 2021

Concentration and competitiveness pertaining to sustainability and alternative forms of energy are displayed above in Table 2. By comparing jobs in 2020, 2021, and projections to 2026, we can observe a consistent increase across most industries and occupations. Location Quotient demonstrates the concentration of industry and potential jobs in an area. Many of these are projected to increase, as is the case for solar power generation, electric distribution and contracting, and vehicle manufacture.

The national growth effect promises an increase in job opportunities across all industries, but the industry mix effect determines some job loss in areas like electronic wholesalers and some areas in Air Conditioning manufacture. The competitive effect will highlight local advantages or disadvantages, presenting contrasting numbers to the expected change, considering national and industry impact. Competitive advantage is emerging in electrical contractors and wiring installations, light truck and utility vehicle manufacture, and electronic parts sales.

Disadvantages are projected to have the most substantial effect in Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing.

surgical services. Considering occupational age breakdown, 44% of jobs are held between the ages of 19-34, 34% of jobs are held by those approaching retirement age. (Source: Occupation Snapshot Report EMSI 2021.3)

WORKFORCE ANALYSIS

Cost of talent is lower than nationally with a lower median salary. Most jobs are found in restaurants, eateries, hospitals, civilian positions with the federal government and healthcare institutions like hospitals, general medical and

In 2020, the median compensation for most positions was approximately \$39,100, based on national median wage of \$41,802 indicating employers will spend approximately 6% less to fill positions. Some of the largest employers are the University of Oklahoma, CDL-A Truck drivers and Integris Health inc. (Refer to Figure 2)

FIGURE 3: TOP COMPANIES & LARGEST EMPLOYERS

Top Companies	Unique Postings	Top Job Titles	Unique Postings
University of Oklahoma	4,058	CDL-A Truck Drivers	5,071
Integris Health, Inc.	2,941	OTR CDL-A Truck Drivers	1,894
Boeing	2,538	Delivery Drivers	1,262
Wal-Mart, Inc.	2,267	Customer Service Represental	1,256
State of Oklahoma	2,012	Dedicated CDL-A Truck Driver	1,179

Top Companies & Largest Employers: Source EMSI 2021

TARGET INDUSTRY ANALYSIS

METHODOLOGY

To better understand the economic nature of the region, we have observed changes in employment and location quotient of the largest industries in the area within the last six years. Location Quotient describes the density of available jobs and concentration of industry, indicating potential competitive advantages and areas trending towards growth. Average annual earnings and automation index

have been evaluated to understand long-term projections and the relationship between earnings, skills, and risk to job loss through disruptive technology leading to increasing automation. We can observe an association between earnings and automation below. Automation will be measured on a scale of 1-100, where 100 indicates an average risk to job loss, as larger numbers will indicate a higher impact to the occupation, trending towards lower earnings and the opportunity to reskill labor towards the growing industry.

TABLE 3: OCCUPATIONS AND EARNINGS

Description	2015 Jobs	2021 Jobs	2021 Hires	2015 - 2021 % Change	2015 Location Quotient	2021 Location Quotient	Avg. Annual Earnings	Automation Index
Management Occupations	41,978	39,436	15,656	(6%)	1.10	0.91	\$103,581.20	85.1
Computer and Mathematical Occupations	15,939	16,604	6,011	4%	0.84	0.76	\$76,842.29	83.4
Architecture and Engineering Occupations	13,240	12,853	3,969	(3%)	1.17	1.10	\$88,384.89	87.0

Life, Physical, and Social Science Occupations	5,770	5,313	1,862	(8%)	0.94	0.81	\$80,969.12	84.6
Arts, Design, Entertainment, Sports, and Media Occupations	10,624	11,815	5,435	11%	0.85	0.96	\$52,600.89	89.9
Sales and Related Occupations	67,109	63,936	52,138	(5%)	0.97	1.01	\$44,039.08	94.9
Office and Administrative Support Occupations	98,898	90,985	58,800	(8%)	1.08	1.06	\$38,512.91	98.0
Construction and Extraction Occupations	39,236	38,897	24,588	(1%)	1.28	1.20	\$48,458.99	123.4
Installation, Maintenance, and Repair Occupations	29,793	29,858	15,810	0%	1.12	1.11	\$48,916.99	108.9
Production Occupations	30,485	28,845	17,868	(5%)	0.75	0.75	\$41,356.64	113.8

Occupations and Earnings. Source: EMSI 2021

Table 3 automation indexes demonstrate a higher risk for construction and extraction occupations, along with production and maintenance/repair occupations.

Occupations in sales, media and design, and administrative support have a lower automation index, often due to the social and skilled aspects of the jobs related, but not necessarily paired with annual earnings that are lower or similar to those with rising automation risk. The lowest automation index belongs to areas like management, computer and engineering occupations, life sciences, and advanced management, generating the largest incomes.

Considering location quotient, the area has seen an increase in the arts, design, and entertainment industries and sales-related occupations, while production, installation, and repair have maintained relatively constant. Management, engineering, and computer-oriented occupations have decreased.

WORKFORCE:

To keep up with current market demands, Workforce development has become crucial for the success of industry development, often encouraged by adjacent industries, complementary and services. Growing industry segments often require training, work-based learning experiences, and certifications,

becoming a route to increased upskilling in anticipation of market needs and the support of small businesses. Defining skills needed for jobs available now for today’s graduates. Many workers will be returning to workforce as extended unemployment benefits run out, and many are exploring new career paths that have more employment stability/security.

Workers need opportunities that combine jobs now with skill building for the future. More work-based learning strategies will be needed.

Specific concerns were voiced in reference to overworked counselors, high job demands with limited staff, and low awareness of existing programs maintain the strain on existing staff. Workforce development solutions need a focus on electric energy, the development of soft skills, digital literacy while providing flexibility in terms of hybrid and remote work accommodations. The importance of broadband and the alignment of employer needs and curriculum development were emphasized.

EMPLOYERS:

Growing trends with employers suggest the need for the development of supply chains for products and services, including the training of technicians forming a specialized labor pool. Opportunities for complementary services and products, considerations about increasing

importance skill development and digital literacy. Professional career ready and basic soft skills always a high priority as employers are willing to provide specific technical training for those start with solid work ethic, basic education, math and sound communications skills, and basic IT knowledge.

STAKEHOLDER ENGAGEMENT ROUNDTABLE OUTCOMES

1. There is a thirst for talent among the industries represented. It is a challenge to find the talent that is needed for industry to thrive. Changes are needed in the ways we develop, recruit, and advance talent.
2. Within the need for talent, there is a need for exacting strategies to find the right talent. As we heard, a sub-optimal match between a job and a person leads to lower job satisfaction, lower retention, and increased training costs.
3. It is important to engage in concerted action at the ecosystem level. These are major challenges, and they are best addressed by the concerted action of a broad community like the one ACOG has assembled for these meetings/discussions.
4. There are data-driven solutions available to enhance the efficiency of the talent market. ELocker is one of those solutions that provides tools, resources, and a comprehensive whole-person approach for individuals to securely document their personal evolution and skills acquisition.
5. There are new career exploration awareness opportunities when setting up a new industry sector. Career exploration and awareness of the new industry jobs and educational pathways aligned in both K-12 and higher education to play an active role in building a skilled workforce for the new Modern Electric Energy Sector. Roadtrip Nation is one of those solutions, online digital rich career exploration tools for the region to give consideration in using.
6. The shared interest that binds the group

together is a desire to see Central Oklahoma people, businesses and communities thrive. While continuing to fervently drive things forward as action agents, we also need to broaden the conversation to others who also want the best for Central Oklahoma and hold positions (and access to resources) that will aid in our efforts.

REGIONAL ONE-ON-ONE INTERVIEW OUTCOMES EDUCATION

Interviews with stakeholders indicate a high demand for skilled and efficient workers in battery technology, maintenance, and repair for this energy industry sector. Increasing job opportunities for electricians, designers, electric chemists, device managers, and other occupations in physics have high demand. Recent investment and renewed interest in electric vehicles have created a demand for specific technicians and mechanics skilled in electric battery maintenance, along with the full understanding of the technology. Other educational needs have emerged through sustainable energy practices like electric, solar, geothermal, and battery cell discharge technology skill sets.

While solar energy occupational programs of study were implemented a few years back, the industry was slow in growing thus many of the projected employment opportunities did not happen. Hence, educational partners are conservative in making new training program investments unless the industry and its regional employers are fully committed partners. The Career Tech Compact in Oklahoma City area provides a foundation for work on meeting the needs of the Advanced Energy sector.

The model that was used for Aerospace sector can be applied to Advanced Energy sector.

Educational programs of study crosswalks can be strengthened between K-12 and higher education (2+2 programs, dual credits) to meet the needs of Advanced Energy sector. Employers will need to engage with students at earlier grade levels to

provide information about job availability and to generate excitement about the sector.

To expedite and make the educational process more efficient, strong advocacy has emerged for the transferability of credits to reduce cost for students and better align education with the needs of regional employers and encourage attendance for existing programs. This direction will favor the local economy and teach students the wide array of career paths associated with this industry, along with the reinforcement of trade school education not only satisfying demand but creating a specialized local labor pool that may attract other employers and complementary industries to the area.

Emphasis was also placed on skills surrounding high voltage, skill transfer, and early student engagement.

WORKFORCE

Gaps in the current labor force were identified in the need for engineers, geothermal specialists, and advanced knowledge in cell batteries. Few existing career paths for new electric energy occupations discourage the workforce from engaging in these areas, demanding technological and cultural change to encourage sustainability and corporate social responsibility. Alliances and partnership-building efforts need to be promoted following models like Tulsa, where a renewable business alliance was formed.

Other issues the local workforce encounters are around the availability of supportive services such as childcare, forcing many to find alternative jobs or exit the workforce entirely due to prohibitive childcare costs. Additional concerns over affordable housing and cultural activities to retain younger families and skilled workers. Special attention to diversity, equity, and inclusion and attention to displaced oil workers were heavily emphasized throughout interviews.

EMPLOYERS

Employers are requested to have a more substantial presence in schools and in the public workforce system to engage with younger

generations and introduce potential career paths in sustainability and related trade skills that can lead to gainful employment faster than other 4-year college alternatives and industries. Employers are in high demand of full-time workers and will often provide work-based learning opportunities. Apprenticeships, good wages, and mentorship opportunities are offered to entice potential employees and those with transferable skills from the oil industry.

LEADERSHIP WORKSHOP SESSIONS

TPMA conducted industry research combined with the roundtable outcomes and produced a discussion document to spark deep level conversations for the industry leadership planning committee. Next, TPMA facilitating two three-hour leadership planning workshops to review and discuss the findings, identify priority areas, develop the workforce plan vision, actionable goals and strategies for ACOG and key regional and state partners to carry out over the next three years of the plan. Several key themes shared consistently among the regional leaders emerged from these planning sessions and are listed directly below.

The Regional Workforce Strategy Plan will support five themed pillars:

FIGURE 4: CEDS GOALS AT A GLANCE



VISION, GOALS AND GUIDING PRINCIPLES

Three overarching priorities have been the foundation for the planning process and continue as guiding principles for implementation of the plan:

DATA INFORMED DECISIONS

Current, historical, and emerging data and trends are continually used to make informed decisions in a rapidly changing economic environment. Analysis of official data combined with interviews and surveys of employers, educators, and other stakeholders has shaped the plan and will continue to be essential during implementation.

VOICE OF THE STAKEHOLDERS

Multiple input sessions, workshops, and interviews served to assess the current environment of opportunities and challenges, and to leverage the current programs and

initiatives for moving the blue print forward. These voices will now be essential as champions, advocates, and monitors of progress as the plan is implemented.

ACTION ORIENTATION

While a long-term vision and mission will always be the “north star” for our actions, the plan has been developed with an orientation toward immediate, realistic action. Such action will mobilize partners, raise visibility, continue momentum, and ensure sustainability toward achievement of the long-term vision.

Embedded in the planning and implementation process are the key goals set out in the original grant for this sector partnership: creating and sustaining a culture of innovation; demonstrating government agility in creating laws and policies; and focusing on the resiliency of the stakeholders in the community as we navigate successfully in the post-pandemic environment.

VISION

NEW MODERN ELECTRIC ENERGY WORKFORCE PLAN

Oklahoma possesses a sophisticated ecosystem of government, education, and businesses united by strategic goals to catalyze advancement in the new modern electric energy industry cluster.

GOALS AND STRATEGIES

PILLAR

1

MODERN ENERGY EMPLOYER LEADERSHIP & ADVOCACY

GOAL: Create an open engagement to allow for supporting and growing the industry through regional & state partnerships with government, regional chambers and councils of government, workforce development board, educational institutions, and other key stakeholders.

STAKEHOLDERS: ACOG; State Government Leaders - Sec. of Energy and Environment, Sec. of Commerce, Director of Oklahoma Office

of Workforce Development, elected officials; OCAST (Oklahoma Center for Advancement of Science and Technology); Chambers of Commerce; Education Leaders, Regional School Superintendents; Central Oklahoma Workforce Innovation Board (COWIB); Industry Business Leaders.

TABLE 4: PILLAR 1 ACTION STEPS

	YEAR 1	YEAR 2	YEAR 3
ACTION STEPS	Form Industry Association Group	Legislation Introduced in support of industry needs	Educational Policies and Standards are Implemented and Evaluated
	Identify industry Champions	Educational standards and policies development to decrease completion barriers support new industry career pathways with work-based learning opportunities embedded in programs and direct recruitment links with COWIB participants	First Annual New Electric Energy Convention/Summit held
	Create Advocacy Plan	Marketing continues with industry culture push in changing conversations in support of new industry	Industry Sustainability Plan Developed
	New Industry Marketing	5 Contact CareerTech’s engage in regional effort delivering a skilled workforce	Industry Incentives for Scaling and Expanded

METRICS:

- Increase in new businesses created within the new energy industry
- Growth in industry jobs created and citizens employed
- Increased employer engagement
- High level of participation
- Enhanced industry-related credentials offered and awarded
- Increased workforce participation rate
- High levels of regional awareness
- Average workforce age decline/increased younger workforce employed within industry

PILLAR 2 REAL TIME DATA TRACKING

GOAL: Establish an industry sector workforce dashboard where all partners can contribute outcomes and performance metrics.

STAKEHOLDERS: ACOG; COWIB; Oklahoma Dept. of Career Technical Education; Oklahoma Dept. of Higher Education; Oklahoma Office of Workforce Development; OESC; Greater Oklahoma City Chamber

TABLE 5: PILLAR 2 ACTION STEPS

	YEAR 1	YEAR 2	YEAR 3
ACTION STEPS	Data Workgroup Convenes develops data dictionary to include labor quantity; labor quality; training programs; credentials awarded; jobs attained; jobs retained.	Dashboard Implemented and scaled regionwide to all partners	Dashboard sustainability plan developed and implemented
	Reporting Rules developed, disseminated, and professional development around the rules and data dictionary	Professional development continues for new staff onboarding throughout the sector partnership's organizations	Scale to other regions within the state
	Dashboard developed and piloted	Data System evaluated and modified where needed	

METRICS:

- Dashboard implemented and supported by all partners
- Oklahoma New Energy Job Board utilized by all partners

PILLAR 3 TALENT PIPELINE (K-GRAY)

GOAL: Implement new industry specific career pathway strategies to fulfill the employment needs of a skilled workforce.

STAKEHOLDERS: Oklahoma Department of Higher Education; Oklahoma Career and Technical Education; Oklahoma Office of Workforce Development; Oklahoma Department of Commerce; Regional School Superintendents; 5 Career Technical Education (CTE) Contact; Central Oklahoma Workforce Innovation Board (COWIB); Association of Central Oklahoma Governments (ACOG).

METRICS:

- New Modern Electric Skilled Workforce Talent pipeline for regional businesses
- Continuous number of student referrals to/from partner organizations into new programs of study
- Student credentialed completers placed in new industry jobs
- X number of Faculty trained within New Industry
- Sustainable funding source to support programs of funding established.

TABLE 6: PILLAR 3 ACTION STEPS

	YEAR 1	YEAR 2	YEAR 3
ACTION STEPS	Individual Career Academic Planning (ICAP) expansion, Legislation Introduced	Staffing/Faculty Resources addressed	Staffing/Faculty Resources evaluated and addressed with Sustainability Plans
	Aligned Career Pathways (K-Gray)	Budgetary needs identified and met	Budgetary needs identified and met for programs of study sustainability
	Convene Industry, Workforce Development, and all levels of Education Leaders to create common skill competencies for all to work with and list of industry occupations.	Engagement with Parent Teacher Association around industry workforce needs	Professional Development resources for faculty and workforce professionals (local, state, community action agencies) in support of new industry, reporting processes, recruitment processes, and job placements processes.
	Research technology enhanced training curriculum and simulators	New programs of study with work-based learning opportunities implemented	Funding resources identified and implemented into annual budgeting exercises.
	Establish a New Energy Industry Career Month of Activities	Implement employer survey to ensure employer needs are being met with programs of	To be defined after first year activities are completed and industry
		study and making efforts for program improvements	remains in support of sustaining.
	5 Contact CTE industry programs of study launched and scaled	Student performance reporting starts (retention and completion, credentials awarded, degrees awarded)	To be defined after first year activities are completed and industry remains in support of sustaining.
		Planning begins for city. New Electric Energy Career Academy	To be defined after first year activities are completed and industry remains in support of sustaining.
		Job Placements are made with local industry employers are reported	To be defined after first year activities are completed and industry remains in support of sustaining.

PILLAR 4 **EXISTING WORKFORCE TRANSITIONS (ADULT WORKERS)**

GOAL: Engage key community service providers and recruit participant applicants for new industry training programs and jobs.

STAKEHOLDERS: COWIB, Oklahoma Office of Workforce Development, Community Action Agency (Urban League, American Job Center, etc., Industry Employers, All 5 Career Technical Education CTE Contacts: Higher Education.

TABLE 7: PILLAR 4 ACTION STEPS

	YEAR 1	YEAR 2	YEAR 3
ACTION STEPS	Identify industry common skill needs, current transferable skills and cross walked to New Occupations and Programs of Study	Design and vet new industry training programs curriculum with employers	Continue training program evaluations with employers and students, make necessary modifications where needed.
	Design and implement aligned industry career pathways (K-Gray) for workforce and educational partners to utilize.	Education partners, workforce partners and employers recruit and enroll first cohorts for training pilots and evaluation; modify where necessary	Develop sustainability plans for new program offerings of training
	Formalize a Credit for Prior Learning Policy and practices for adult students to accelerate their completion in programs of study	Track and report student performance, completion, credentials awarded	Engage in community awareness campaign of program offerings and new industry labor market information
	Identify technology needs to allow for simulated training; etc.	Formalize the job placement and/or advancement steps with community partners and employers, track, and report.	To be defined after first year activities are completed and industry remains in support of sustaining.

TABLE 7: PILLAR 4 ACTION STEPS CONTINUED

<p>Identify changes needed in higher education to connect to adult learners</p>	<p>Evaluate accessibility to programs is diverse, equitable, and inclusive.</p>	<p>To be defined after first year activities are completed and industry remains in support of sustaining.</p>
<p>Accessing virtual workers – attract & connect to talent outside state</p>	<p>To be defined after first year activities are completed and industry remains in support of sustaining.</p>	<p>To be defined after first year activities are completed and industry remains in support of sustaining.</p>
<p>Identify where incumbent work training is needed through employer engagement surveys and meetings</p>	<p>To be defined after first year activities are completed and industry remains in support of sustaining.</p>	<p>To be defined after first year activities are completed and industry remains in support of sustaining.</p>
<p>Engage and formalize three-year partner agreements detail roles, responsibilities, meeting and reporting guidelines of new industry needs and programs.</p>	<p>To be defined after first year activities are completed and industry remains in support of sustaining.</p>	<p>To be defined after first year activities are completed and industry remains in support of sustaining.</p>

METRICS:

- Continuous number of adult learner/student referrals to/from partner organizations into new programs of study Continuous number of student referrals to/from partner organizations into new programs of study
- Student credentialed completers placed in new industry jobs or promoted within the industry
- Partner agreements are in place and sustained

PILLAR 5 PLATFORM FOR ADVANCEMENT
5 MODERN ENERGY HUB OF INNOVATION

GOAL: Sustain a new industry shared vision, regional strategies and expand awareness of industry successes, and promote open communication among state, local and regional partners.

STAKEHOLDERS: ACOG; all Partners will have one representative to serve

TABLE 8: PILLAR 5 ACTION STEPS

	YEAR 1	YEAR 2	YEAR 3
ACTION STEPS	Create Innovation/ Entrepreneurship Hub	Evaluate Funding Resource Plan and make efforts for improvements and begin planning stages of launching a fundraising campaign.	Continue to evaluate Funding Resource Plan and make efforts for improvements and a fundraising campaign is launched.
	Determine partner meetings through ACOG as convener & staff support	1 st industry awareness campaign held with industry messaging that serves both rural and urban needs as well as industry successes	2 nd industry awareness campaign held with industry messaging that serves both rural and urban needs as well as program successes
	Implement a funding resource plan, track funding sources	Engage new leaders and industry partners to grow the industry	Continue to engage new leaders and industry partners to grow the industry
	Implement a process for scanning funding grants quarterly	Manage the dashboard outcome metrics ensuring reporting is being performed and corrective actions are managed with partners	Manage dashboard outcome metrics ensuring reporting is being performed and corrective actions are managed with partners

TABLE 8: PILLAR 5 ACTION STEPS CONTINUED

<p>Implement a process for partner engagement agreements and establish a communication platform for all stakeholders to utilize.</p>	<p>To be defined after first year activities are completed and industry remains in support of sustaining.</p>	<p>To be defined after first year activities are completed and industry remains in support of sustaining.</p>
<p>Develop a new industry awareness campaign and partner roles to support.</p>	<p>To be defined after first year activities are completed and industry remains in support of sustaining.</p>	<p>To be defined after first year activities are completed and industry remains in support of sustaining.</p>
<p>Implement an industry resource (web portal, other) for all partners to access for trends, best practices, industry updates, partner needs, etc.</p>	<p>To be defined after first year activities are completed and industry remains in support of sustaining.</p>	<p>To be defined after first year activities are completed and industry remains in support of sustaining.</p>

METRICS:

- A Funding Resource Plan is activated and sustained
- New Modern Electric Industry annual awareness campaign implemented with quarterly success news stories reported in all media platforms
- Industry leadership members and partners have increased
- Regional Industry Dashboard implemented and utilized by all partners

IMPLEMENTATION RECOMMENDATIONS

Resiliency goal aimed to build modern energy centered economy through business development and attraction, diversification of the economic base and development to address social, economic, and environmental disruptions. These recommendations would emphasize the following:

BUSINESS GROWTH AND RECRUITMENT

The 2019 CEDS prioritizes the support of the region's business retention and expansion (BRE) and recruitment programs to ensure local businesses have the tools and support they need to thrive.

WORKFORCE DEVELOPMENT

The 2019 CEDS prioritizes support for the region's energy, technology, and manufacturing workforce development partners in strengthening the talent pipeline. Additional emphasis should be placed on innovative partnerships between business and education, as well as efforts to cross-train and upskill employees in critical skill sets, especially as it relates to modern energy, energy storage, and technology.

- Support for Career Tech's high school "Work Keys" Certification Program and their Energy Career Cluster will prepare students for technical jobs. Increased training for data science, engineering, and battery technology would complement current workforce development efforts and help stabilize energy sector industries which have been heavily impacted by the Covid-19 pandemic.
- Support efforts for equitable access to remote work equipment as well as regional collaboration for teacher attraction and retention to support strong workforce development in the energy, energy storage, manufacturing, and technology sectors.
- Enhance availability and access to training and certification programs for small,

minority owned, and women-owned businesses, particularly in the energy, energy storage, manufacturing, and technology sectors.

TALENT ATTRACTION

Grow the regional talent pool of skilled workers and remote workers. Despite a high quality of life and varied employment opportunities, the region loses highly skilled talent to other parts of the U.S. This is due, at least in part, to the perception that the region does not have high-wage tech opportunities.

- Ensure the region has the resources needed to attract and support remote workers focusing on battery technology and manufacturing.
- Support regional marketing efforts to attract talent.

EQUITY AND DIVERSITY

- Promote the importance of diversity in the energy sector, supplier diversity, and business diversification; create the potential for greater innovation and productivity to help realize the business benefits of this potential.
- Support fair treatment in access, opportunity, and advancement for all individuals by identifying and working to eliminate barriers to equitable treatment for disadvantaged groups.

INNOVATION (BUSINESS ADAPTION)

Support the adaptability of business models for current and future needs, localization and shortening of supply chain, innovative solutions, ecommerce, etc.

- Facilitate communication between business and community leaders to inform policy responsiveness as it pertains to the energy sector.
- Provide support for cooperative competitiveness and networking groups where entrepreneurs can share ideas.

AGILITY (PARTNERSHIPS AND COLLABORATION AND POLICY RESPONSIVENESS): PARTNERSHIPS AND COLLABORATION.

- **KEY PARTNERS:** ACOG's energy cluster partnership should be strengthened as a backstop for organizational leadership resiliency, community assessments, and sharing of tools and methods. Collaboration with energy companies, battery technology and manufacturing industry leaders should be emphasized. Alliance with educational programs to promote the upskill, training, and retention of the workforce should also be underscored.
- **POLICY RESPONSIVENESS:** Policy and ordinance flexibility are vital to economic recovery. Local governments must remain agile to the changing needs of communities, especially as it relates to business development in the energy sector.

LEADERSHIP SYMPOSIUM

It was determined, early-on in the Pandemic, that there was a significant gap in the type of leadership skills required to lead our communities through this calamity and one of the greatest challenges when addressing the need for effective solutions to help alleviate Oklahoma's workforce development challenges. That gap is a lack of professional development training opportunities for elected and appointed local officials in our region. The end-goal of providing this executive level training is to ensure that civic and business leaders know and are consistently made aware of information and approaches necessary to positively stimulate their community's workforce.

In response, ACOG created and hosted a Leadership Symposium on November 5th, 2021, with funding assistance from its workforce development grant. The invitees consisted of 110 senior elected and appointed officials from the fifty communities that ACOG serves, as well as other significant leaders from the private & public sectors. The day consisted of leadership growth activities, followed by a facilitated panel of five resource experts who shared their leadership development insights. The day culminated with a presentation by the keynote

speaker, Dr. Bruce Hull, an acclaimed professor, and author of the best-selling book, *Leadership for Sustainability: Strategies for Tackling Wicked Problems*.

FUNDING SCAN AND RESOURCES

U.S. DEPARTMENT OF ENERGY - NOVEMBER 9, 2021

A key piece in President Biden's Build Back Better agenda, the Infrastructure deal includes more than \$62 billion for the U.S. Department of Energy (DOE) to deliver a more equitable clean energy future for the American people.

INVESTING IN AMERICAN MANUFACTURING AND WORKERS

REVITALIZING DOMESTIC SUPPLY CHAINS AND AMERICA'S MANUFACTURING LEADERSHIP

The Bipartisan Infrastructure Deal's investments in clean energy technology supply chains will allow America to make the energy technologies of the future right here at home, boosting our competitiveness within a global clean energy market expected to reach \$23 trillion by the end of the decade. These investments will create jobs up and down the supply chain—especially manufacturing jobs and skills-matched opportunities for fossil fuel workers.

The Infrastructure deal will:

- **Invest more than \$7 billion in the supply chain for batteries**, which are essential to powering our economy with 24/7 clean, affordable, and resilient energy and transportation options. This will include producing critical minerals, sourcing materials for manufacturing, and even recycling critical materials without new extraction/mining.
- **Provide an additional \$1.5 billion for clean hydrogen manufacturing and advancing recycling RD&D.**
- **Create a new \$750 million grant program to support advanced energy technology manufacturing projects in coal communities.**

- **Expand the authority of DOE's Loan Program Office (LPO)** to invest in projects that increase the domestic supply of critical minerals and expand LPO programs that invest in manufacturing zero-carbon technologies for medium- and heavy-duty vehicles, trains, aircraft, and marine transportation.

INVESTING IN AMERICA'S WORKFORCE

Investing in America's workers means investing in America's future. When combined with the Build Back Better Act, the Bipartisan Infrastructure Deal will add an average of 1.5 million jobs per year, over the course of the decade, while accelerating America's path to full employment and increasing labor force participation. These jobs will be spread across every pocket of the country, and the vast majority will not require a college degree.

The Infrastructure deal will:

- **Require all construction workers on projects funded by the deal to be paid prevailing wages**, according to the Davis-Bacon Act.
- **Invest hundreds of millions in workforce development**, giving workers in the electric grid, clean buildings, and industrial sectors access to training in cutting-edge technologies that will spur their careers in the years to come.
- **Establish a multi-agency Energy Jobs Council** to work with stakeholders and oversee the development and release of energy jobs and workforce data to inform decisions by governments, businesses, and other stakeholders at the national, state, and local level.
- **Expanding Access to Energy Efficiency and Clean Energy for Families, Communities and Businesses**

The Bipartisan Infrastructure Deal will turbo-charge clean energy deployment by funding several highly effective **state** and **local** programs that will spur projects that increase access to energy efficiency to save money for American families, businesses and communities, help achieve clean energy goals

and accelerate job growth. The Infrastructure deal also expands existing DOE grant and loan programs to help **states** weatherize homes, increase energy efficiency, and **expand clean generation**.

The Infrastructure deal will:

- **Invest \$3.5 billion in the Weatherization Assistance Program** to increase energy efficiency, increase health and safety, and reduce energy costs for low-income households by hundreds of dollars every year.
- **Invest \$500 million to provide cleaner schools for our children and teachers** by providing energy efficiency and renewable energy improvements at public school facilities, along with a \$5 billion EPA effort to replace thousands of polluting diesel school buses with electric buses. Together, these investments will reduce energy costs in our schools and improve teacher and student health by improving indoor air quality.
- **Invest \$550 million in the Energy Efficiency and Conservation Block Grant Program (EECBG) and \$500 million in the State Energy Program** to provide grants to communities, cities, states, U.S. territories, and Indian tribes **to develop and implement clean energy programs and projects that will create jobs**.

DELIVERING RELIABLE, CLEAN, AND AFFORDABLE POWER TO MORE AMERICANS

BRINGING THE ELECTRICAL GRID INTO THE 21ST CENTURY

Extreme weather events like the Dixie Wildfire, Hurricane Ida, and the 2021 Texas Freeze have made it clear that our existing energy infrastructure cannot endure the impacts of climate change. Modernizing and expanding the electricity grid will make our energy sector more resilient, while enabling the buildout of affordable, reliable, clean energy to support President Biden's goal of 100% clean power by 2035.

The Infrastructure deal will:

- **Provide \$11 billion in grants for states, tribes, and utilities to enhance the resilience of the electric infrastructure against disruptive events such as extreme weather and cyber-attacks.**
- Establish a \$2.5 billion Transmission Facilitation Program for DOE to help develop nationally significant transmission lines, increase resilience by connecting regions of the country, and improve access to cheaper clean energy sources.
- Back a **\$3 billion expansion of the Smart Grid Investment Matching Grant Program**, focusing on investments that improve the flexibility of the grid. These include upgrading existing transmission and distribution systems, and other actions, like deploying energy storage. Together, it will help the grid accommodate a new energy future where families and businesses often generate their own clean energy through microgrids and other distributed energy sources.

MAINTAINING OUR EXISTING CLEAN GENERATION FLEET

Our nation already gets 27% of its power from decades-old nuclear and hydropower facilities. These are critical sources of clean power—but as they get older and more expensive to maintain, we risk losing these major sources of pollution-free energy and good-paying jobs. The Bipartisan Infrastructure Deal provides funding to ensure that we can keep these clean energy sources online.

The Infrastructure deal will:

- **Allocate \$6 billion for the Civilian Nuclear Credit program to prevent premature retirement of existing zero-carbon nuclear plants**, helping to save thousands of good-paying union jobs across the country. The program is available for plants that would otherwise retire and are certified as safe to continue operations and prioritizes plants that use domestically produced fuel.
- **Invest more than \$700 million in existing hydropower facilities** to improve efficiency, maintain dam safety, reduce environmental

impacts, and ensure generators continue to provide emission-free electricity.

BUILDING THE TECHNOLOGIES OF TOMORROW THROUGH CLEAN ENERGY DEMONSTRATIONS

While the technologies needed to decarbonize most of our economy are both available and affordable thanks in part to decades of technology development led by DOE, further innovation is a critical component of meeting the President's goals of 100% carbon-free electricity by 2035 and a net-zero-carbon economy by 2050. With the Bipartisan Infrastructure Deal, America's scientists and researchers will have the resources they need to demonstrate these clean energy breakthroughs and prove them out at scale.

The Infrastructure deal will:

- **Provide \$21.5 billion in funding for clean energy demonstrations and research hubs** focused on next generation technologies needed to achieve our goal of net-zero by 2050, including:
 - **\$8 billion for clean hydrogen**, which will turbo-charge our progress toward heavy trucking and industrial sectors that run without producing carbon pollution.
 - **More than \$10 billion for carbon capture, direct air capture and industrial emission reduction**, providing skills-matched opportunities for fossil fuel workers.
 - **\$2.5 billion for advanced nuclear**, which would provide 24/7 clean electricity and create good-paying jobs.
 - **\$1 billion for demonstration projects in rural areas and \$500 million for demonstration projects in economically hard-hit communities.**

U.S. ECONOMIC DEVELOPMENT ADMINISTRATION (EDA)

The **Build Back Better Regional Challenge** is designed to assist communities nationwide in their efforts to build back better by

accelerating the economic recovery from the coronavirus pandemic and building local economies that will be resilient to future economic shocks.

The \$1 billion Build Back Better Regional Challenge will provide a transformational investment to 20-30 regions across the country that want to revitalize their economies. These regions will have the opportunity to grow new regional industry clusters or scale existing ones through planning, infrastructure, innovation and entrepreneurship, workforce development, access to capital, and more.

- **Phase 1:** 50-60 regional coalitions of partnering entities will be awarded ~\$500,000 in technical assistance funds to develop and support three to eight projects to grow a regional growth cluster.
- **Phase 2:** EDA will award 20-30 regional coalitions \$25 million to \$75 million, and up to \$100 million, to implement those projects.

As part of the \$300 million **Coal Communities Commitment**, EDA will allocate at least \$100 million of the Build Back Better Regional Challenge funding to support coal communities.

EDA invites eligible applicants to form regional coalitions to apply for funding to implement a collection of three to eight distinct but related projects in their region, in coordination with industry and community partners, and aligned around a holistic vision to build and scale a strategic industry cluster. Applicants should identify one key coordinating lead institution per regional cluster to lead the concept and projects into the implementation phase, while fostering collaboration and coordinating resources to ensure these investments have the greatest economic impact on our communities, regions, and the nation.

Coalition members eligible to apply for investment assistance for their region include a(n):

- District Organization of an EDA-designated Economic Development District
- Indian Tribe or a consortium of Indian Tribes

- State, county, city, or other political subdivision of a State, including a special purpose unit of a State or local government engaged in economic or infrastructure development activities, or a consortium of political subdivisions
- Institution of higher education or a consortium of institutions of higher education
- Public or private non-profit organization or association acting in cooperation with officials of a political subdivision of a State

This application closes on March 15, 2022

On March 11, 2021, President Joseph R. Biden signed the American Rescue Plan into law. This historic legislation was designed to enable all Americans to respond to and recover from the impacts of COVID-19.

Under the American Rescue Plan, EDA was allocated \$3 billion in supplemental funding to assist communities nationwide in their efforts to build back better by accelerating the economic recovery from the coronavirus pandemic and building local economies that will be resilient to future economic shocks.

American Rescue Plan funding enables EDA to provide larger, more transformational investments across the nation while utilizing its greatest strengths, including flexible funding to support community-led economic development.

EDA's American Rescue Plan Good Jobs Challenge aims to get Americans back to work by building and strengthening systems and partnerships that bring together employers who have hiring needs with other key entities to train workers with in-demand skills that lead to good-paying jobs.

Through the Good Jobs Challenge, EDA is allocating \$500 million to collaborative skills training systems and programs. EDA encourages efforts to reach historically underserved populations and areas, communities of color, women, and other groups facing labor market barriers such as persons with disabilities, disconnected youth, individuals in recovery, individuals with past criminal records, including justice impacted

and reentry participants, serving trainees participating in the Supplemental Nutrition Assistance Program (SNAP), Temporary Assistance for Needy Families (TANF) and Women, Infants and Children (WIC), and veterans and military spouses.

These systems and partnerships will create and implement industry-led training programs, designed to provide skills for and connect unemployed or underemployed workers to existing and emerging job opportunities. These systems are designed to train workers with the skills to secure a union job or a quality job that provides good pay, benefits, and growth opportunities.

EDA will fund proposals within the following three phases, as applicable to regional needs:

1. **System Development:** Help establish and develop a regional workforce training system comprised of multiple sector partnerships
2. **Program Design:** Develop the skills training curriculum and materials, and secure technical expertise needed to train workers
3. **Program Implementation:** Implement non-construction projects needed to provide workforce training and connect workers with quality jobs, including wrap-around services

The Good Jobs Challenge is designed to support the needs of an applicant's identified regional workforce system through a single integrated award. EDA will make awards to either the System Lead Entity of a regional workforce system or the Backbone Organization of a sectoral partnership as the lead applicant. These organizations may make subawards to other eligible recipients as necessary to the proposed project and as approved by EDA.

Eligible applicants for EDA's Good Jobs Challenge include a(n):

- District Organization of an EDA-designated Economic Development District
- Indian Tribe or a consortium of Indian Tribes

- State, county, city, or other political subdivision of a State, including a special purpose unit of a State or local government engaged in economic or infrastructure development activities, or a consortium of political subdivisions
- Institution of higher education or a consortium of institutions of higher education
- Public or private non-profit organization or association acting in cooperation with officials of a political subdivision of a State

This application closes on January 26, 2022.

Oklahoma Resources: Oklahoma is an energy state, with renewable energy providing a significant opportunity to continue this leadership position. Home to the 9th best wind resource in the nation, Oklahoma has no lack of renewable energy resources available to its residents.

The Oklahoma State Energy Office works in partnership with the U.S. Department of Energy and their individual technology programs to facilitate deployment of renewable technologies across Oklahoma. Further information on the individual technologies and technical assistance resources can be found on their respective websites.

Oklahoma Secretary of Energy & Environment the Office of the Secretary of Energy & Environment (OSEE) was formed to serve as the Governor's chief advisor on energy and environmental issues. This office would be a great resource for assistance in identifying State funding resources.

The Oklahoma State Energy Office works in partnership with two DOE designated Clean Cities programs in Oklahoma to advance alternative fuel vehicle efforts across the state. Clean Cities program partners advance the nation's economic, environmental and energy security by supporting local efforts to reduce petroleum consumption in transportation. The two designated Clean Cities programs in Oklahoma bring together stakeholders in public and private sectors to deploy alternative and renewable fuels, idle-reduction measures,

and emerging transportation technologies along with providing technical assistance to stakeholders for efforts taking place in Oklahoma.

CENTRAL OKLAHOMA

The Central Oklahoma Clean Cities program is housed within the Association of Central Oklahoma Governments located in Oklahoma City.

For information contact Clean Cities Central Oklahoma at 405-234-2264 or okcleancities@acogok.org.

Oklahoma Department of Commerce: Economic Development Services – A regional approach to economic development. A tailored regional approach to address regional challenges and opportunities through their regional specialists. Regional partnerships allow groups of communities to band together to grow jobs with existing businesses and attract new investment.

Oklahoma Office of Workforce Development - The Oklahoma Office of Workforce Development (OOWD) is a division of the Oklahoma Department of Commerce. Under the direction of the Governor’s Council for Workforce and Economic Development, the OOWD works to align resources, education, training, and job opportunities to build the state’s workforce. OOWD aims to ensure all Oklahomans have the skills and education necessary to enter and advance in rewarding careers and Oklahoma businesses have the talented workforce they need to succeed.

Oklahoma Energy Workforce Consortium - Oklahoma Energy Workforce Consortium is a partnership among Oklahoma energy companies and organizations with a mission to raise awareness about the energy industry and career pathways available to Oklahoma students. The consortium represents the energy industry, education, government, and community leaders united to build a talent pipeline for Oklahoma’s energy sector.

The Oklahoma Energy Workforce Consortium is launching a new energy career cluster to promote the benefits of pursuing careers in the

industry. Energy is the highest-paying industry in the state, averaging more than \$100,000 annually.

Leaders within the energy industry initiated the OEWC to address a looming shortage of skilled workers that is expected nationwide by 2025. With the help of educational leaders, the group aims to engage the next generation by adding a new career cluster to the Oklahoma Department of Career and Technology Education’s instructional framework.

In anticipation of the new career cluster’s introduction, Gov. Kevin Stitt issued a state proclamation recognizing Oct. 19-23, 2020, as Oklahoma Careers in Energy Week.

“The energy sector is a key element of Oklahoma’s economic growth, and it is more diverse and modern than many realize,” Stitt said. “The next generation of bright minds and aspiring leaders will continue this work. These students represent the future of our state, and the unity within this career cluster, encompassing some of our largest industries, including utilities, renewable energy and oil and gas, shows the ever-increasing diversity and complexity of Oklahoma’s energy sector.”

In addition to industry leaders, the consortium includes representatives from CareerTech, common education, higher education and government focused on creating a pipeline of talented, diverse individuals to meet future needs within the state’s energy sector.

“Providing opportunities for students to learn about the important industries in their own communities through partnerships like this one is a long-valued pillar at CareerTech,” said Marcie Mack, state director of CareerTech. “The Energy Career Cluster is the most recent example of CareerTech’s ability to partner with employers and all levels of education within Oklahoma and equip students with tools and skills they need to thrive within our state’s diverse workforce.”

The Energy Career Cluster will be one of 17 career clusters in Oklahoma and will be added to the list of industry-specific sectors that constitute CareerTech’s instructional framework.

“So many rewarding careers exist within the

energy sector,” said PSO President and Chief Operating Officer Peggy Simmons. “We rely on highly skilled workers to serve our customers and drive innovation to shape the future. Students interested in earning competitive wages in a field with unlimited potential should consider a career in energy – we’d love to have bright and creative minds join our team.”

The OEWC cites the impending workforce shortage as a major driver for its formation. Most schools have or are implementing STEM programs and curriculum, which is a vital component of energy jobs. STEM-related skills are also very transferable across many jobs and many other industries, providing students with many more options when it comes time to choose a career or pursue a college degree in a high-wage, high-demand STEM field.

“Increasing awareness of educational pathways for Oklahoma’s critical occupations is a key element of the state system of higher education’s ongoing efforts to advance educational attainment in our state,” said Chancellor Glen D. Johnson of the Oklahoma State Regents for Higher Education. “Our state system colleges and universities offer numerous degree options to prepare graduates for employment in the energy sector.”

“The Workforce Development mission is to drive success by connecting industries and education to build a workforce for today and a talent pipeline for tomorrow,” said Don Morris, executive director of the Oklahoma Office of Workforce Development. “Key partnerships such as this make a true difference for job seekers, businesses, and all of Oklahoma. This type of teamwork and camaraderie are what make Oklahoma the place people want to live and work.”

“I’m proud to partner with Oklahoma CareerTech, the Oklahoma State Regents for Higher Education and the Oklahoma Energy Workforce Consortium to support a new career cluster for energy,” said State Superintendent of Public Instruction Joy Hofmeister. “Oklahoma’s future depends on students who are prepared today for a highly specialized workforce of tomorrow. This career cluster will help develop a talent pipeline to meet the demands in our state for qualified energy careers.”

“This partnership is a great opportunity to showcase what a career in energy really looks like and show the positive benefits of working in one of the largest industries in Oklahoma,” said Brook A. Simmons, President of the Petroleum Alliance of Oklahoma. “We are able to carry out our association’s mission to build a better Oklahoma through capital investments and investing in the future of the oil and natural gas industry through students.”

“We are challenged with meeting our energy needs reliably, affordably and in environmentally responsible ways,” said Chris Meyers, general manager, and CEO of the Oklahoma Association of Electric Cooperatives. “There’s never been a more exciting time to be a part of this industry.”

OEWC, initiated by industry leaders and endorsed by state education leaders, is planning to celebrate Careers in Energy Week by highlighting the importance of energy, the benefits of the industry and how students can get involved in the field. On Oct. 21, 2022 at 2 p.m., CareerTech will host a virtual discussion on Zoom about the career cluster’s launch. The group has long-term plans to work closely with educators, career counselors and parents to raise awareness about the energy industry.

OKLAHOMA DEPARTMENT OF EDUCATION

Oklahoma Department of Education has access to federal and state COVID-19 pandemic recovery funding that should be accessible to support new educational offerings in support of statewide and regional workforce development rapid recovery efforts in increasing a skilled workforce to support new and emerging technologies and industry sectors.

Oklahoma Edge is the Oklahoma State Department of Education’s commitment to ensuring all students have the opportunity and support to successfully secure a postsecondary degree or industry certification that reflects each individual’s passions and skills. This Oklahoma state program supports not only students but regional communities, educators and other key workforce stakeholders.

Collaboration between education, business and community is needed to ensure Oklahoma

students graduate career-ready. Together, we can create meaningful career pathways and career-readiness resources while providing all students with the Oklahoma Edge to succeed beyond high school. View the steps our partners are taking to support Oklahoma kids and learn how you can get involved below.

Oklahoma Works Oklahoma Works aligns resources, education, training and job opportunities to build Oklahoma’s workforce.

OKLAHOMA WORKS STRATEGIC DELIVERY PLAN

Oklahoma Works’ strategic priorities are coordinated by the Governor’s Council for Workforce and Economic Development.

OKLAHOMA GOVERNOR’S COUNCIL FOR WORKFORCE AND ECONOMIC DEVELOPMENT

The Oklahoma Governor’s Council for Workforce and Economic Development brings together leaders from the business, government, education and non-profit sectors to coordinate workforce development with economic development.

CAREER PATHWAYS COMMITTEE

The Oklahoma Career Pathways Committee makes recommendations, informs, coordinates and facilitates statewide efforts to improve

CONCLUSION

This New Modern Electric Energy Workforce Plan is built on Central Oklahoma’s strong foundation that enables quick and decisive action from leaders in the ACOG region and the entire Oklahoma City metropolitan area. The plan provides industry businesses, cities, educators, public workforce systems, and stakeholders with a guide that addresses the existing and future labor force within their marketplace. Achievable and measurable actions on an aggressive three-year timeline are described for each of the five pillars: Modern Energy Employer Leadership & Advocacy,

exposure to high-demand career and entrepreneurship opportunities while also providing the education and training required for career advancement.

OKLAHOMA CAREER TECH

The Oklahoma Department of Career and Technology Education provides leadership and resources for a comprehensive statewide system of career and technology education.

OKLAHOMA STATE REGENTS FOR HIGHER EDUCATION

The State Regents provide academic standards of higher education, determine functions and courses of study at state colleges and universities, manage scholarships, grant degrees and approve allocations for public colleges and universities.

OKLAHOMA SCHOOL COUNSELOR ASSOCIATION’S BOARD

The Oklahoma School Counselor Association (OSCA) is a chartered state division of the American School Counselor Association (ASCA) that supports school counseling efforts to help students focus on academic, emotional/ social and career development so they achieve success in school and are prepared to lead fulfilling lives as responsible members of society.

Real-Time Data Tracking, Talent Pipeline, Existing Workforce Transitions, and Platform for Advancement. This strategic workforce plan will require continued collaboration between all regional entities to grow the industry sector and support it with a skilled workforce. Through the commitment of industry sector partners and the implementation of the steps outlined in the plan’s five pillars, the region will take the bold and immediate action necessary to position the region as a leader in the new clean energy economy.

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ACOG staff, regional industry leaders, state and local educational, economic, and workforce leaders, and many community action agency providers have provided valuable time and input into the creation of this strategic actionable workforce plan.

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