



Developing the Energy Workforce: Challenges and Solutions



CEWD OVERVIEW

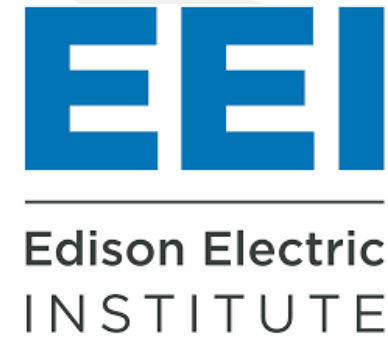
The Center for Energy Workforce Development (CEWD) is a non-profit consortium of energy companies, contractors, associations, unions, educators, and business partners working together to ensure a skilled, diverse workforce pipeline to meet future industry needs.

CEWD harnesses the power of a united industry to advance shared workforce development priorities.





CEWD IS PROUD TO
COLLABORATE WITH THESE
ASSOCIATION PARTNERS



CEWD goals



Career Awareness

- CEWD will strengthen awareness and promote the merits of 21st-century clean energy careers.

Increasing Diversity

- CEWD will support the development of a more diverse, equitable, and inclusive energy workforce.

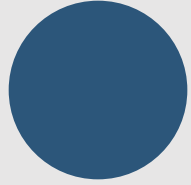
Enhancing Skills

- CEWD will support companies developing employees in increasingly technical and dynamic energy careers.

Supporting Workforce Development Professionals

- CEWD will support the industry's commitment to fostering modern-day work cultures that attract and retain diverse, talented professionals.

THE BIG CONVERSATIONS OF 2022

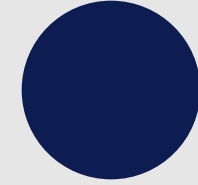


Diversity, Equity, and Inclusion

Re-Skilling and Upskilling

Decarbonization and the Future
of the Energy Workforce

Infrastructure and the Energy
Workforce



Finding Enough Talent!

Training – AR, VR, Digitalization,
etc.

The Great Resignation

Workforce Planning

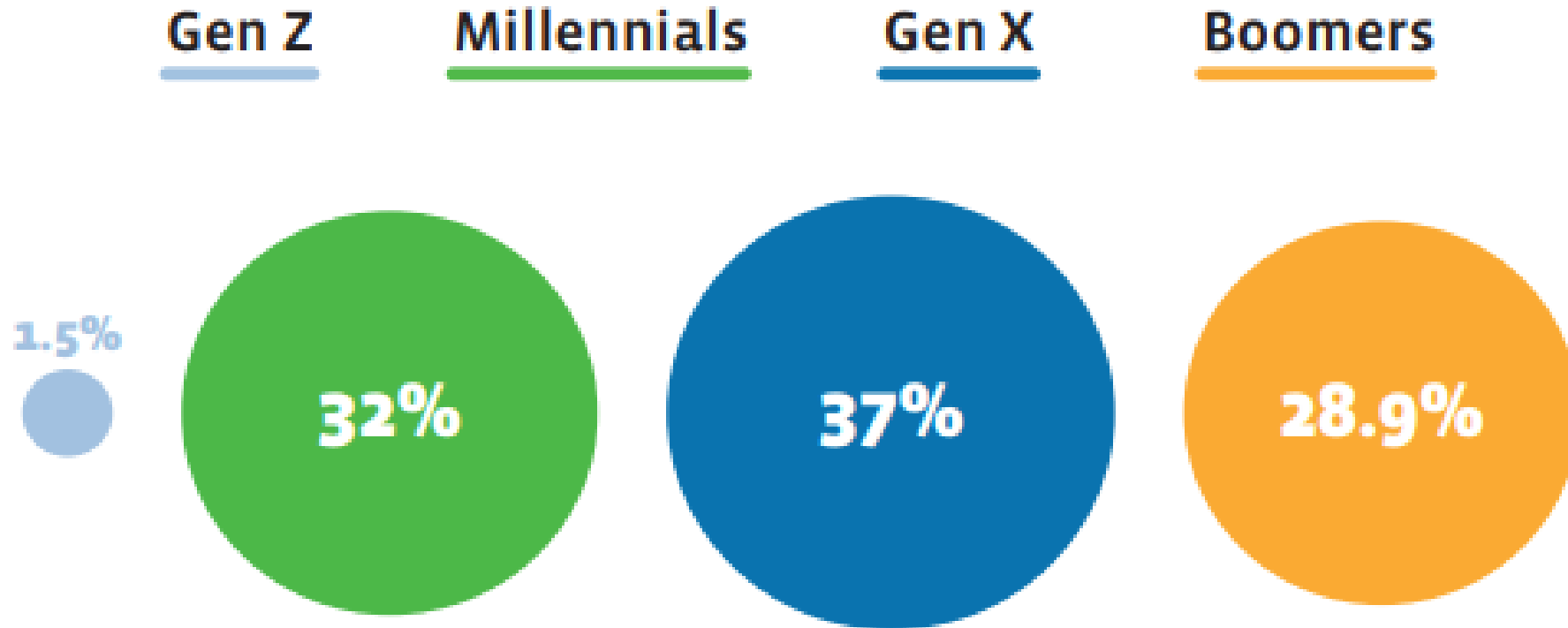
THE ENERGY WORKFORCE

Current State



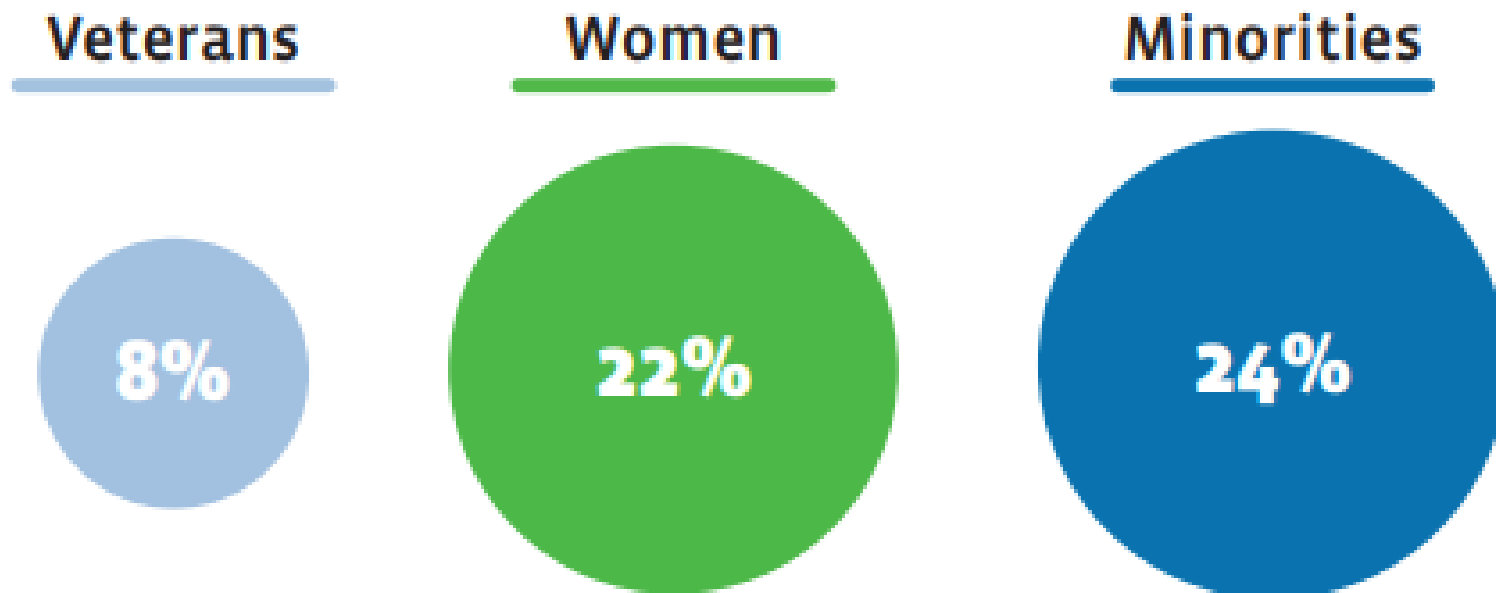
THE ENERGY WORKFORCE IS GETTING YOUNGER

WORKFORCE AGE



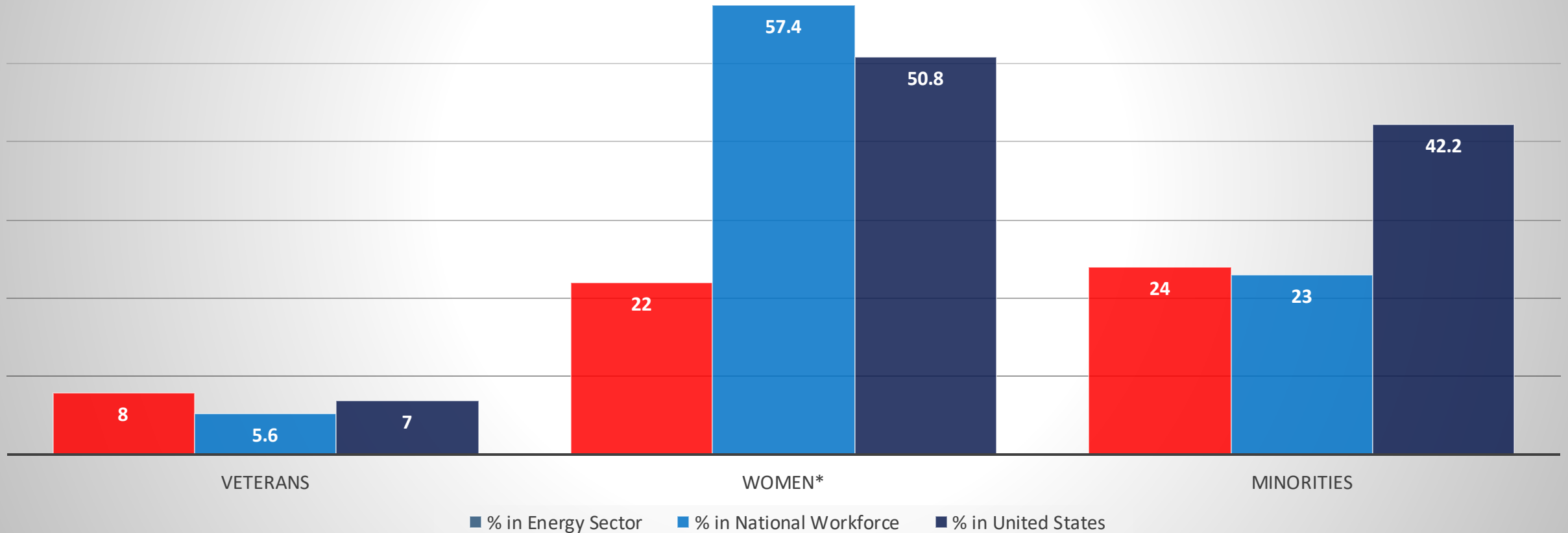
ENERGY EMPLOYERS ARE FOCUSED ON DIVERSITY, EQUITY, AND INCLUSION

ELECTRIC & NATURAL GAS COMPANIES WORKFORCE COMPOSITION

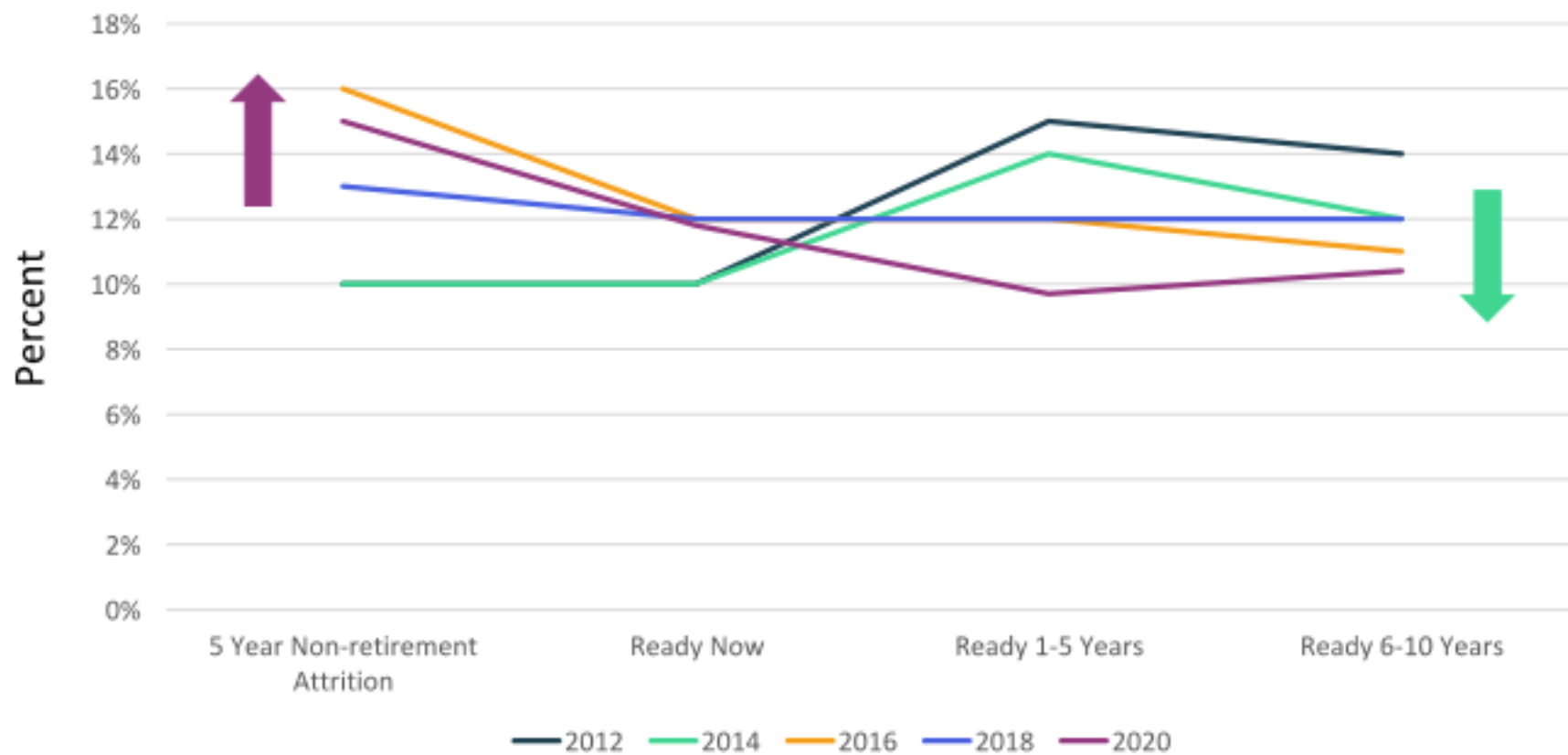


WORKFORCE COMPOSITION DATA*

Electric & Natural Gas Companies



Electric & Natural Gas Utilities Attrition Over Time – Total Company



Electric & Natural Gas Utilities Non-Retirement Attrition

Less than 5 Years of
Service

64%

6 to 10 Years of
Service

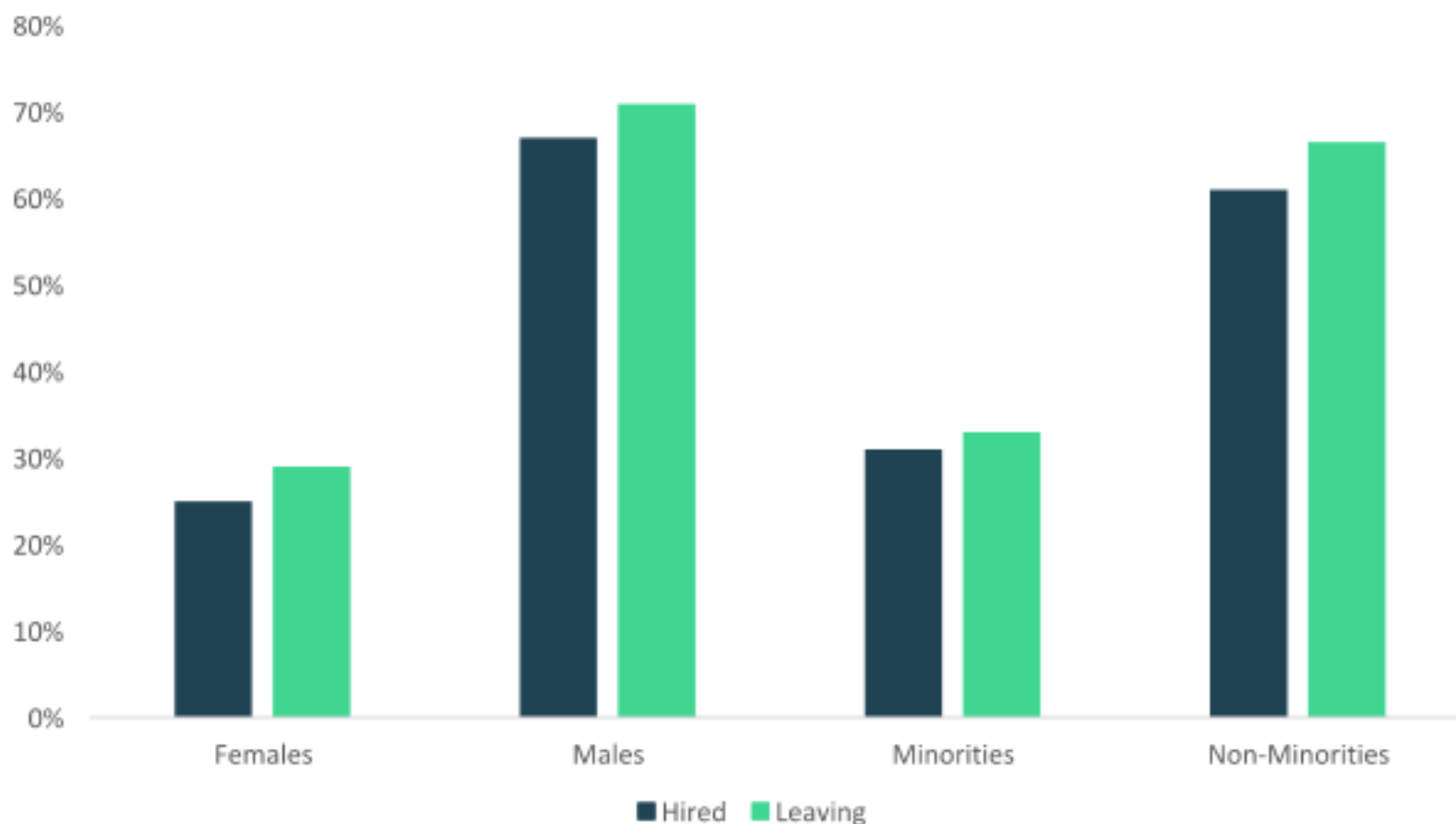
17%

More than 10 Years
of Service

19%

Are we making progress?

In 2020 on a Total Company basis, more employees are leaving than are being hired.



ATTRACTING A SKILLED, DIVERSE ENERGY WORKFORCE

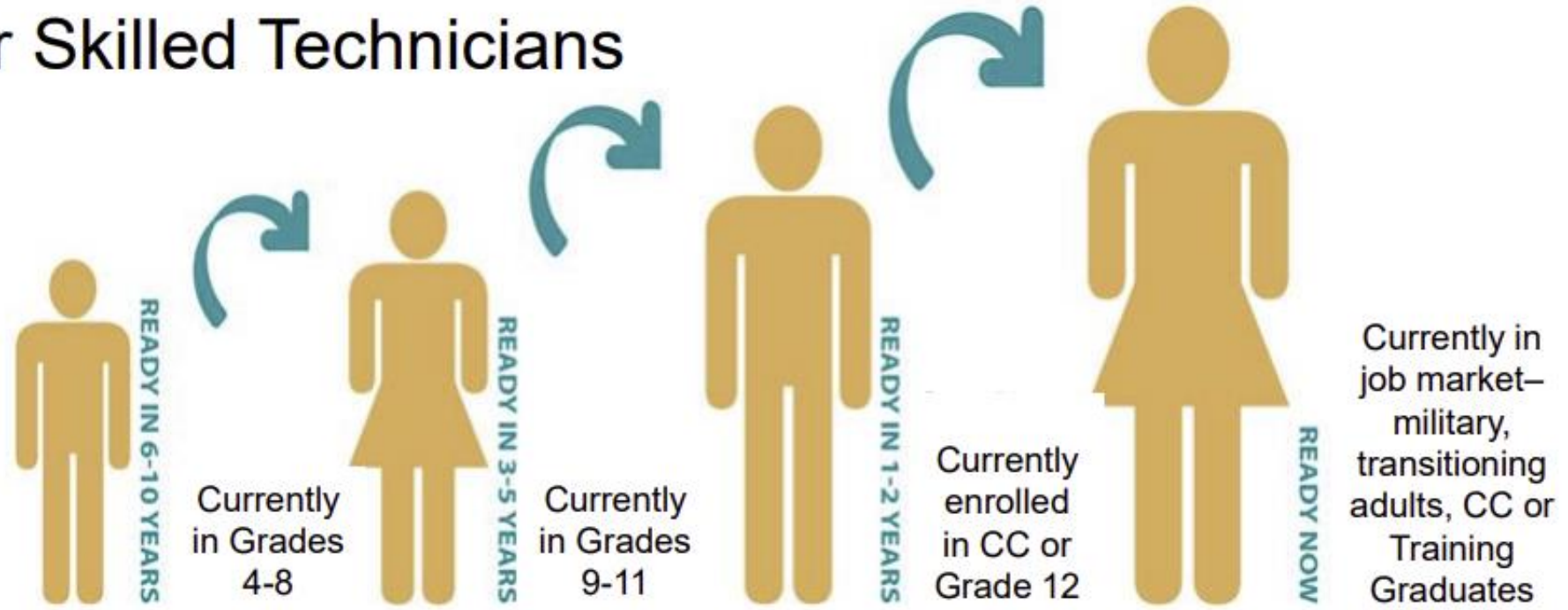


ENERGY INDUSTRY CHALLENGES

- Career Awareness
 - Students
 - Veterans
 - Job Seekers/Career Changers
- Attracting a diverse workforce
 - Reaching untapped resources
- Retention



For Skilled Technicians



For engineers and other positions that require a bachelor's degree, students who will fill positions 6-10 years out are already in High School

HOW TO FIND TALENT

- Up your social media game/career awareness strategy
- Have your youngest (coolest) workers attend career fairs and visit schools
- Partner with community-based organizations
- Collaborate with MSIs
- Connect with your workforce development boards
- Recruit from your backyard / local high schools, churches
- Consider veterans
- Message and recruit differently!



get into energy

Get into Energy GET INTO NATURAL GAS



More than seven million Americans work in energy careers that power our country and our lives. They transform things like natural gas, coal, uranium, water, sun and wind into energy. This essential work requires a multitude of competencies and expertise from a skilled, diverse workforce.

ENERGY PROFESSIONALS WORK IN:

- Skilled trade positions
- Technical operations
- Business and engineering roles

Over 3.4 million jobs are connected to the direct use of natural gas in the United States and over 83 percent of this employment happens within local communities.*

WHAT IS NATURAL GAS AND HOW DOES IT BECOME ENERGY?



Natural gas is the earth's cleanest fossil fuel and is colorless and odorless in its natural state. It is composed of four hydrocarbon atoms and one carbon atom (CH₄ or methane).



Natural gas becomes energy in many ways. It can be used as a source for heating, cooking, and drying products in a residential or small business setting. It can also be used as a source for power generation, transportation of vehicles and small equipment, as well as used with process heating of raw materials.

Natural gas comprises almost one-fourth of all primary energy used in the U.S. and is directly linked to jobs and economic health.



For more information, visit GetIntoEnergy.com

WOMEN IN ENERGY

An Initiative of the Center for Energy Workforce Development



THE ENERGY INDUSTRY POWERS LIFE.

Households, business, education, healthcare, travel, and many of our favorite pastimes are made possible by the energy industry. Its professionals are problem solvers and critical thinkers who work in their communities to actually keep the lights on!

Gender diversity is high on the agenda in the power generation, transmission, and distribution industries. Energy is an evolving industry constantly supporting the continuously growing demand and supply of power to homes, schools, hospitals, and workplaces. With so many challenges, there is a call for innovative approaches, which is why diversity is so important.

Energy companies support the "grow your own" philosophy. Not only do they prefer hiring within their own communities, but they support advancement of their employees. The industry's employees recognize that the more diverse viewpoints and life experiences people bring to the job and work teams, the stronger their companies will be.

FAST FACTS ABOUT ENERGY INDUSTRY EMPLOYMENT

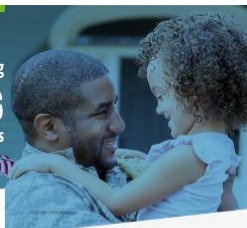
- The energy industry supports 7 million jobs.
- Energy employers involved with electricity expect to hire more than 215,000 people over the next three years.
- There are hundreds of apprenticeship programs offered by energy companies.
- Average compensation for key industry jobs is \$25,000. Many pay much more.
- Energy companies offer tuition reimbursement should a position require an advanced credential or degree.
- Many industry careers focus on environmental stewardship.
- The world will always need energy and, as a result, the energy industry offers the opportunity for a long and stable career.



ENERGY IS AN EVOLVING INDUSTRY

The energy industry is actively seeking women for traditional and non-traditional careers. What is your preference, climbing poles or climbing corporate ladders? In the energy industry women can do both!

The Energy Industry is Actively Seeking Veterans for Mission-Focused, Goal-Driven Careers



THE ENERGY INDUSTRY POWERS LIFE.

Business, education, healthcare, travel, and many of our favorite pastimes are made possible by the energy industry. Its professionals are in high demand as problem solvers and critical thinkers who serve on the front lines of the country's clean energy transition.

They are highly trained, highly skilled first responders who rebuild infrastructure and restore power following storms and natural disasters, and they protect and maintain the electric grid and gas pipelines essential to the way we live. Veterans are uniquely suited for a second career in the energy industry, as they are self-motivated, disciplined, outcome-driven, and safety-conscious.

Employment of veterans is a continuation of their work to protect national security through the production of safe, reliable power for American homes and businesses, fueling our lives and economy.

FAST FACTS ABOUT ENERGY INDUSTRY EMPLOYMENT

- Veterans represent almost 50% of the energy industry's workforce.
- Employees with military training are in high demand, and most industry companies proudly sponsor veterans resource groups.
- The energy industry supports 7 million jobs and hundreds of apprenticeship programs, many offering earn and learn potential.
- Energy employers involved with generating and transmitting electricity expect to hire more than 215,000 people over the next three years.
- Average compensation for key industry jobs is \$25,000. Many pay much more.
- Today's energy sector is heavily reliant on technology proficiency.
- Many industry careers focus on environmental stewardship.



THINKERS & TINKERERS WANTED: An Industry of Opportunity

We need outdoor enthusiasts, doers, gadgeteers, creators, peers, scientists, environmentalists, and those who bring a host of other talents to America's energy sector. There is an especially high demand for lineworkers, utility technicians, gas technicians, engineers, welders, drivers, contractors, and many other key positions.

Get into Energy GET INTO NUCLEAR



More than seven million Americans work in energy careers that power our country and our lives. They transform things like natural gas, coal, uranium, water, sun and wind into energy. This essential work requires a multitude of competencies and expertise from a skilled, diverse workforce.

ENERGY PROFESSIONALS WORK IN:

- Skilled trade positions
- Technical operations
- Business and engineering roles

Nearly 100,000 of these employees work in high-quality, long-term jobs in nuclear energy.

WHAT IS NUCLEAR ENERGY?



Nuclear energy comes from splitting atoms in a reactor to heat water into steam, turn a turbine and generate electricity.



Ninety-four nuclear reactors in 28 states generate nearly 20 percent of the nation's electricity. These plants are always on, well-operated to avoid interruptions and built to withstand extreme weather, supporting the electric grid 24/7.

Nuclear energy powers our homes and businesses. But beyond providing carbon-free electricity, nuclear technology also fuels space exploration, sterilizes medical equipment, provides potable water through desalination, supplies radioisotopes for cancer treatment and so much more. All that from a tiny atom!

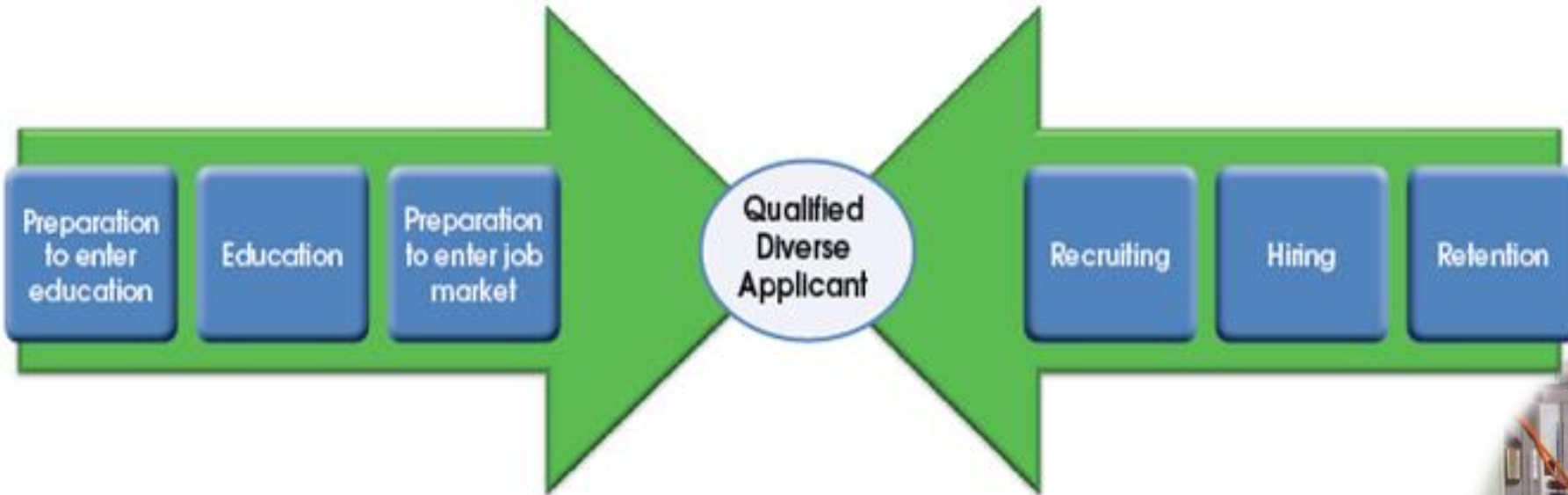
WHAT ARE THE BENEFITS OF CAREERS IN NUCLEAR?

- Nuclear offers meaningful and important work.
- Nuclear provides career advancement opportunities.
- Nuclear fosters teamwork.
- Nuclear protects national security.
- Nuclear fights against a changing climate.
- Nuclear ensures U.S. leadership in technology.
- Nuclear produces electricity reliably.
- Nuclear boosts international development.
- Nuclear protects our air.
- Nuclear powers electric vehicles.



For more information or to explore jobs in nuclear, visit GetIntoEnergy.com

BUILDING A DIVERSE, QUALIFIED TALENT PIPELINE



Companies adequately staffed with a diverse workforce with the right skills to safely keep the energy flowing.



SELECT CEWD INITIATIVES

- Sharable collateral
- Troops to Energy Jobs Initiative
- Multi-year partnership with National Urban League
- Collaboration with Autism Speaks
- Collaboration with National Association of Workforce Boards
- Speaking and exhibiting at shows that matter
- Hosting virtual national career events
- Advocating for energy to be recognized as 17th Career Cluster
- Recruitment toolkits



WHAT ARE ENERGY COMPANIES DOING?

- Energy Academies
- Energy Career Pathways – CTE
- Summer Camps
- Job Shadows
- Summer Internships
- Engaging with MSI
- SkillsBridge
- Partnering with community-based organizations
- Participate/leverage consortia efforts



ENERGY WORKFORCE CONSORTIA

What can we do better together than a part

get into
energy

**FLORIDA ENERGY
WORKFORCE CONSORTIUM**



QUESTIONS



THANK YOU



ROSA@CEWD.ORG



CEWD.ORG

GETINTOENERGY.ORG