

Clean Energy Technology Workforce Advisory Committee: Survey Results



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Survey Details

Goals:

The survey seeks to supplement public data captured by the US Census, the US Bureau of Labor Statistics, and Washington State Employment Security Department by providing additional insight related to:

- Hiring needs
- Workforce development
- In-demand skills and credentialing
- Compensation and benefits
- Industry outlook

Targets:

Employers and Employees participating in the Clean Energy Technology Economy

Survey Design & Limitations:

Online convenience survey. Responses are anecdotal and are not representative of sentiments of employees and employers outside of those taking the survey.



Survey Responses

Survey Name	Response Count
Energy Sector - Employer Survey	34
Energy Sector - Employee Survey	31
Energy Sector – Union Employee Survey	67

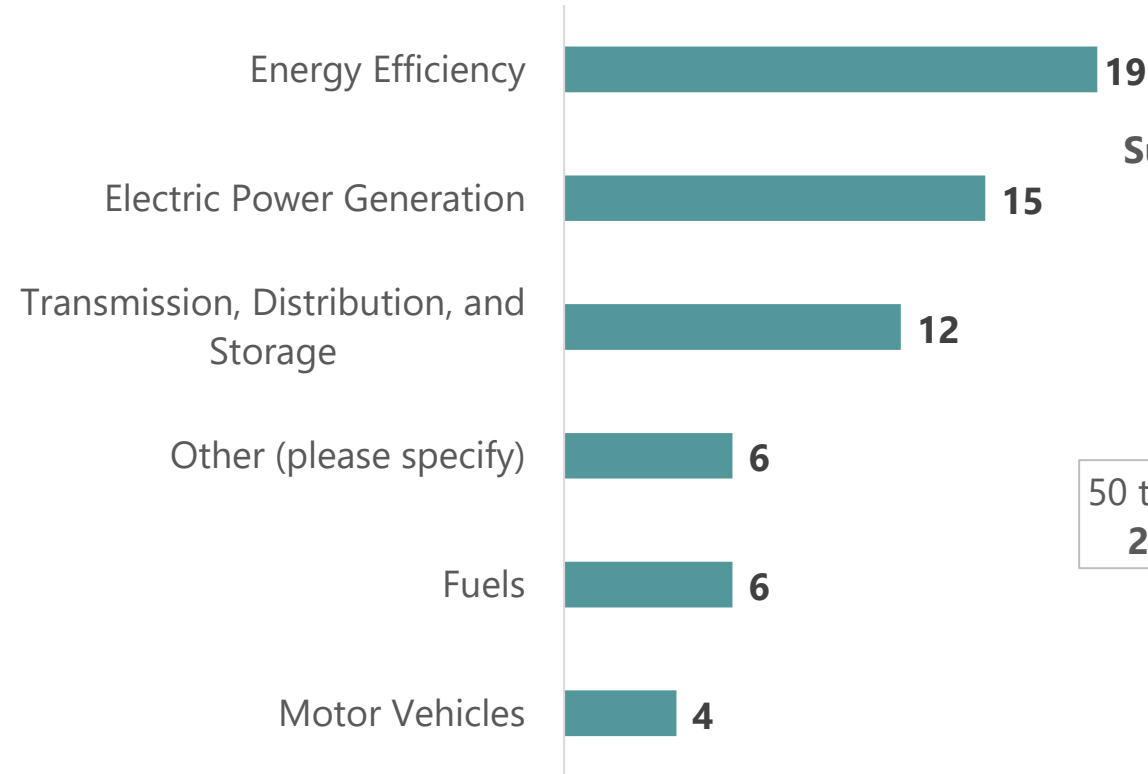
Collection Method:

- Workforce Board Newsletter
- Clean Tech Alliance Newsletter
- Email dissemination through CETWAC membership
- Email/phone call to Department of Commerce grant recipients for clean energy related programs
- Distribution through participating Unions through membership

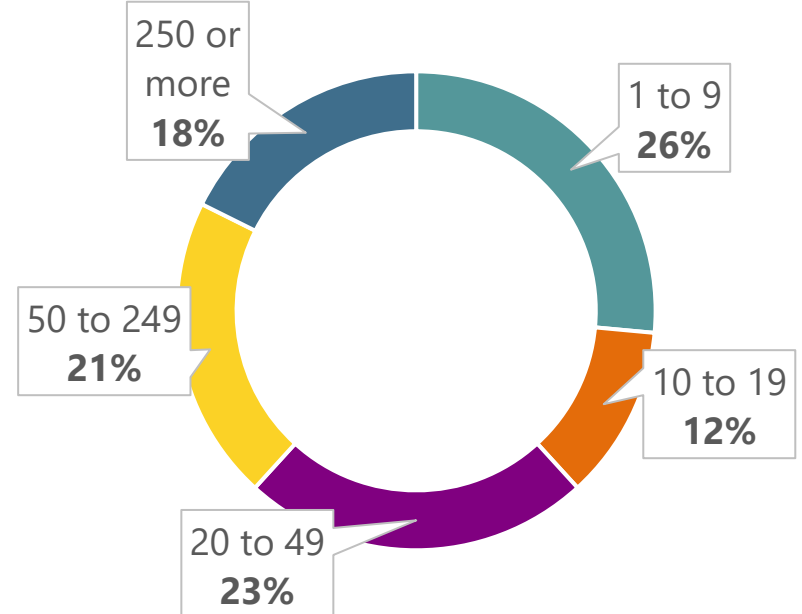


Employer Details

Employer Response Count by Sub-Sector



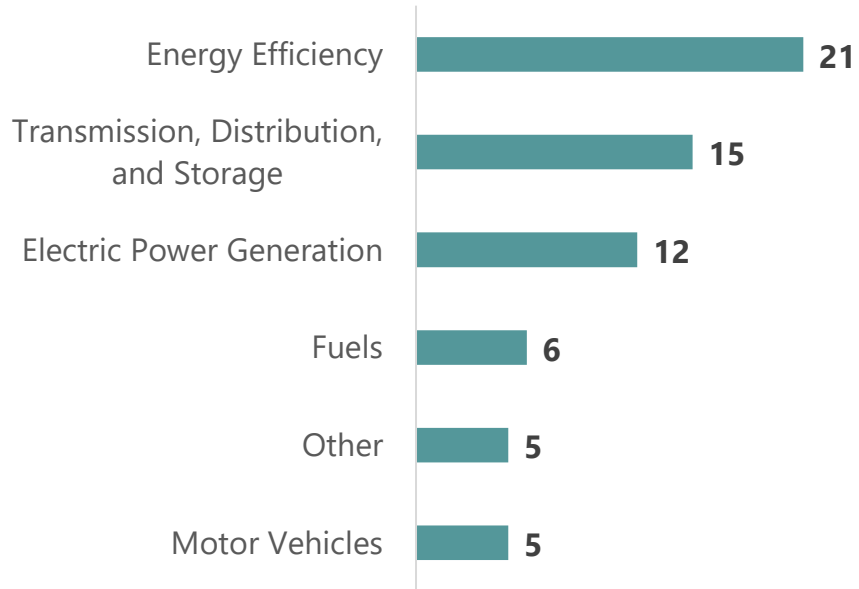
Surveyed Employers by Employee Count



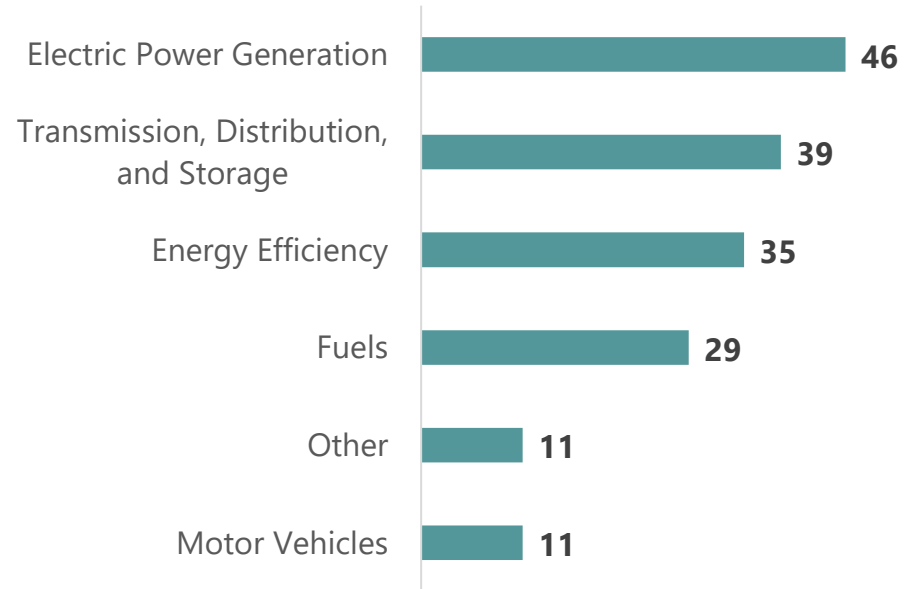


Employee Details

**Non-represented Employee Response
Count by Sub-Sector**



**Union-represented Employee Response
Count by Sub-Sector**





Employers working in 'Clean Tech'

85% of surveyed employers classify their organization as being involved in 'clean energy' or 'clean technology'

Some of the steps these organizations have taken to adopt the use of clean technology and clean energy include:

- Solar installation
- Purchasing carbon offsets
- Transitioning to an electric vehicle fleet
- LEED certification

Reported barrier to adoption:

- High transition costs
- Limited access to funding.
- Mandates related to clean energy technology are either too financially and operationally burdensome or unrealistic.



Employees Working in 'Clean Tech'

Nearly all **non-represented employee** responses self-identified as being in a:

- managerial,
- leadership,
- coordinating,
- sales,
- or advisory position.

Only two responses were from employees identifying as technicians: an electrician and insulation installer.

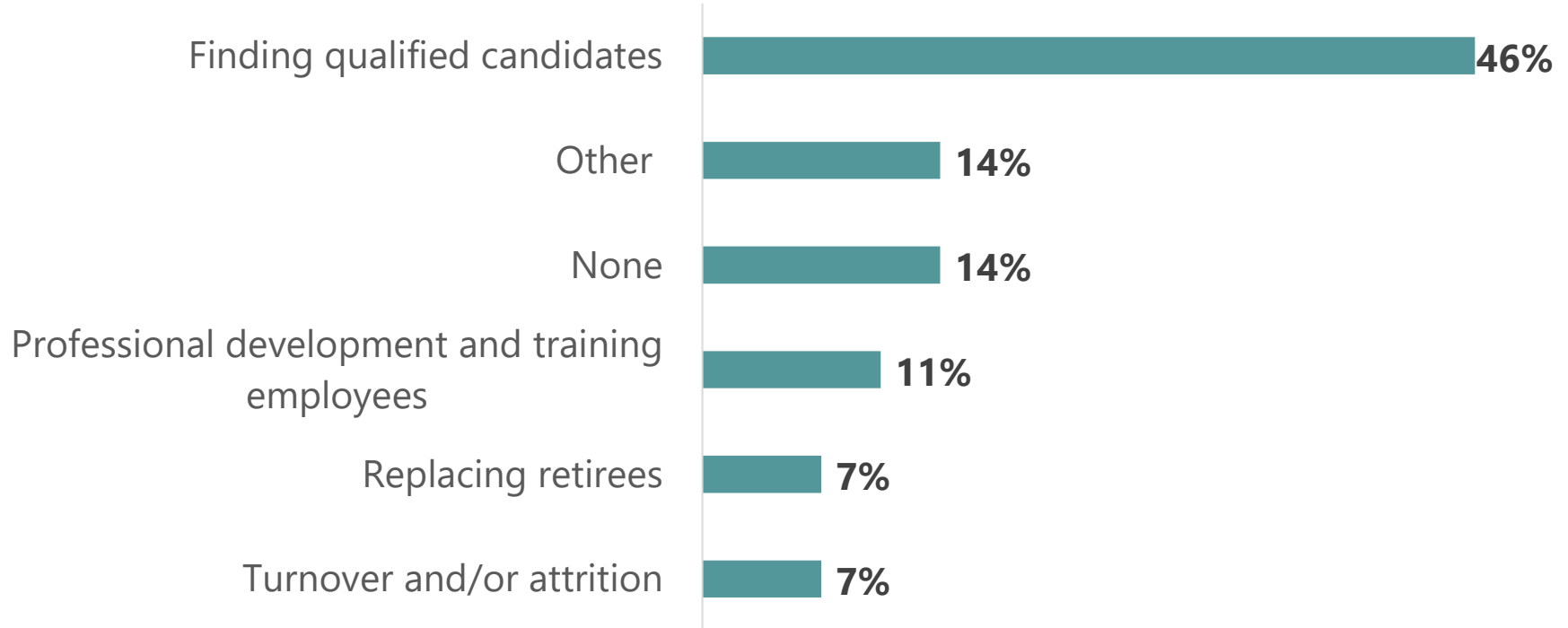
The common roles self-reported **by union-represented employee** responders included:

- Ironworker
- Laborer
- Union representative
- Business representative/ agent
- Process Operator
- Manager
- Apprenticeship coordinator
- Electrician
- Plumber/ steamfitter
- Painter
- Mechanical insulation
- Roofing



Employer Workforce Challenges

Surveyed Employers' Biggest Workforce Challenges in the Last 12 Months





Retirement

“80% of their workforce is retiring in two years. Of a staff of 55, that’s 44 who are scheduled to retire – Pacific County PUD. I asked other PUDs and the average loss over the next two years is around 40 percent. Most middle to upper management taking experience with them.

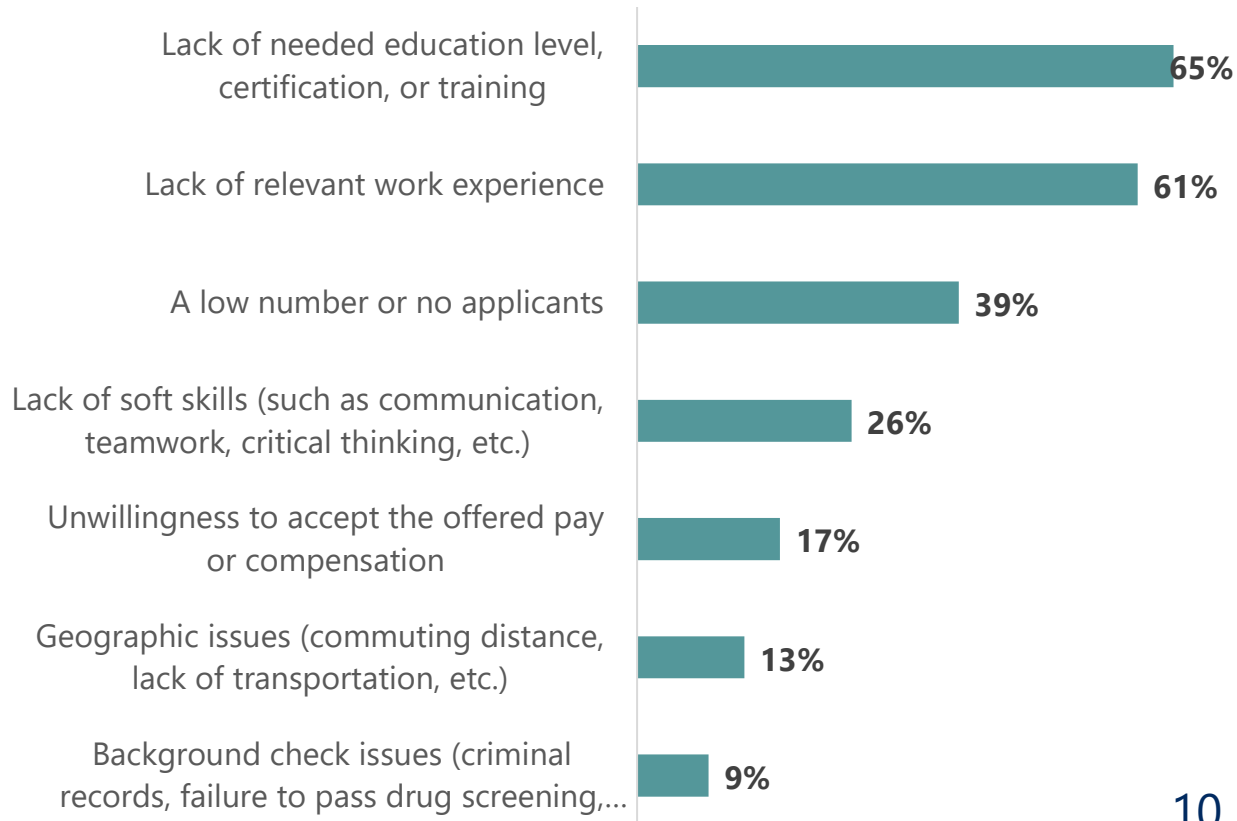
Housing is another issue. It’s difficult to recruit to a rural area that lacks housing for incoming workers.”

Employer Hiring Challenges

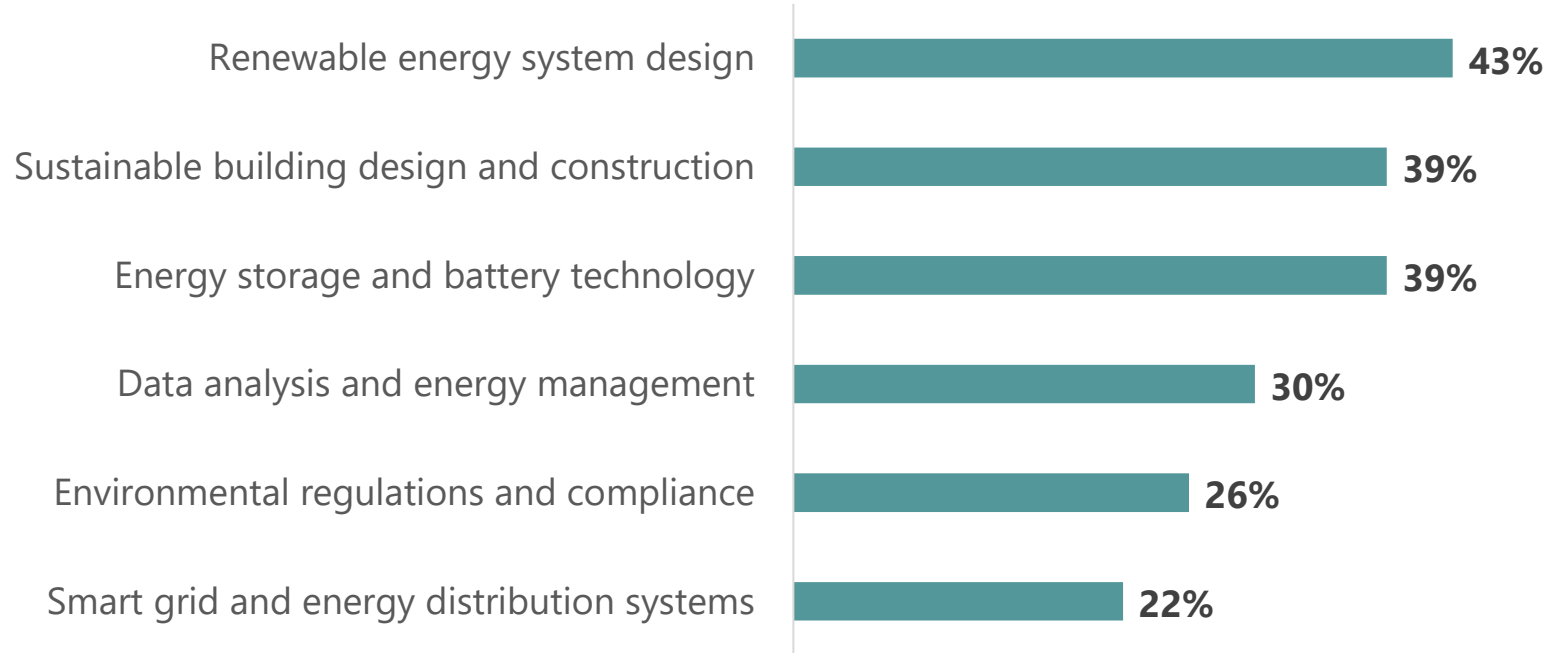
83% of employers
hired employees
within the last 12
months

54% of employers
reported difficulty
hiring

Self Reported Reasons Employers had Difficulty Hiring



In Demand Skill Categories in Clean Energy by Surveyed Employers





In-demand Certifications

- Environmental Protection Agency (EPA) Certifications
- HVAC
- Building Performance Institute (BPI) certifications
- Professional engineer certification
- Certified energy manager
- Certified energy auditing
- Engineering degrees (Chemical, Electrical, Mechanical)
- Project management certifications
- Qualified equipment operators
- Journeyman electricians
- CPR certification
- Quality assurance certifications
- Systems operators

*Reported by
employers



In-demand Skills According to Employees

The types of training that most helped non-represented employee survey responders prepare for the role included:

- Executive leadership training
- Software development
- Certified energy manager
- Trade certification
- Lean Six Sigma
- Professional engineer certification
- Internships
- Journeyman electrician
- Construction management

Union-represented employee survey responders prepared themselves by:

- Apprenticeships/ journeyman
- On-the-job training
- Technical skills training
- Trade certifications









Top Job Postings by Industry (LightCast)

Industry	Total/Unique (Mar 2024 - May 2025)	Posting Intensity	Median Posting Duration
Other Electric Power Generation	167,750 / 52,984	3 : 1	24 days
Power and Communication Line and Related Structures Construction	109,830 / 38,270	3 : 1	25 days
Fossil Fuel Electric Power Generation	71,054 / 28,282	3 : 1	26 days
Solar Electric Power Generation	52,414 / 17,037	3 : 1	27 days
Wind Electric Power Generation	26,286 / 7,306	4 : 1	25 days
Electric Bulk Power Transmission and Control	21,478 / 6,909	3 : 1	23 days
Hydroelectric Power Generation	12,609 / 4,890	3 : 1	26 days
Battery Manufacturing	14,209 / 4,185	3 : 1	31 days
Biomass Electric Power Generation	3,140 / 1,718	2 : 1	24 days
Nuclear Electric Power Generation	3,019 / 1,142	3 : 1	23 days

Note: Industry here is defined as Clean tech Electricity Generation and Distribution



Top Job Posting Titles (LightCast)

Job Title	Total/Unique (Mar 2024 - May 2025)	Posting Intensity	Median Posting Duration
Project Managers	3,880 / 1,390	3 : 1 	24 days
Solar Sales Representatives	8,549 / 1,266	7 : 1 	30 days
Technicians	5,623 / 1,221	5 : 1 	38 days
Field Service Technicians	2,264 / 1,016	2 : 1 	18 days
Wind Technicians	4,380 / 909	5 : 1 	26 days
Commissioned Sales Representatives	8,175 / 908	9 : 1 	30 days
Installation Technicians	1,845 / 818	2 : 1 	17 days
Field Technicians	1,666 / 741	2 : 1 	26 days
Administrative Assistants	2,125 / 699	3 : 1 	23 days
Wind Turbine Technicians	2,538 / 664	4 : 1 	31 days



Top In-Demand Skills (LightCast)

Skills	Postings	% of Total Postings	Profiles	% of Total Profiles ?	Projected Skill Growth	Skill Growth Relative to Market ?
Project Management	35,371	22%	80,610	18%	+19.8%	Rapidly Growing
Construction	22,734	14%	16,707	4%	+10.5%	Growing
Auditing	13,690	8%	19,832	4%	+21.8%	Rapidly Growing
Accounting	12,646	8%	21,672	5%	+24.0%	Rapidly Growing
Finance	12,471	8%	15,824	3%	+27.3%	Rapidly Growing
Continuous Improvement Process	11,698	7%	13,467	3%	+23.4%	Rapidly Growing
Procurement	9,979	6%	15,353	3%	+13.8%	Growing
Process Improvement	9,904	6%	34,909	8%	+27.0%	Rapidly Growing



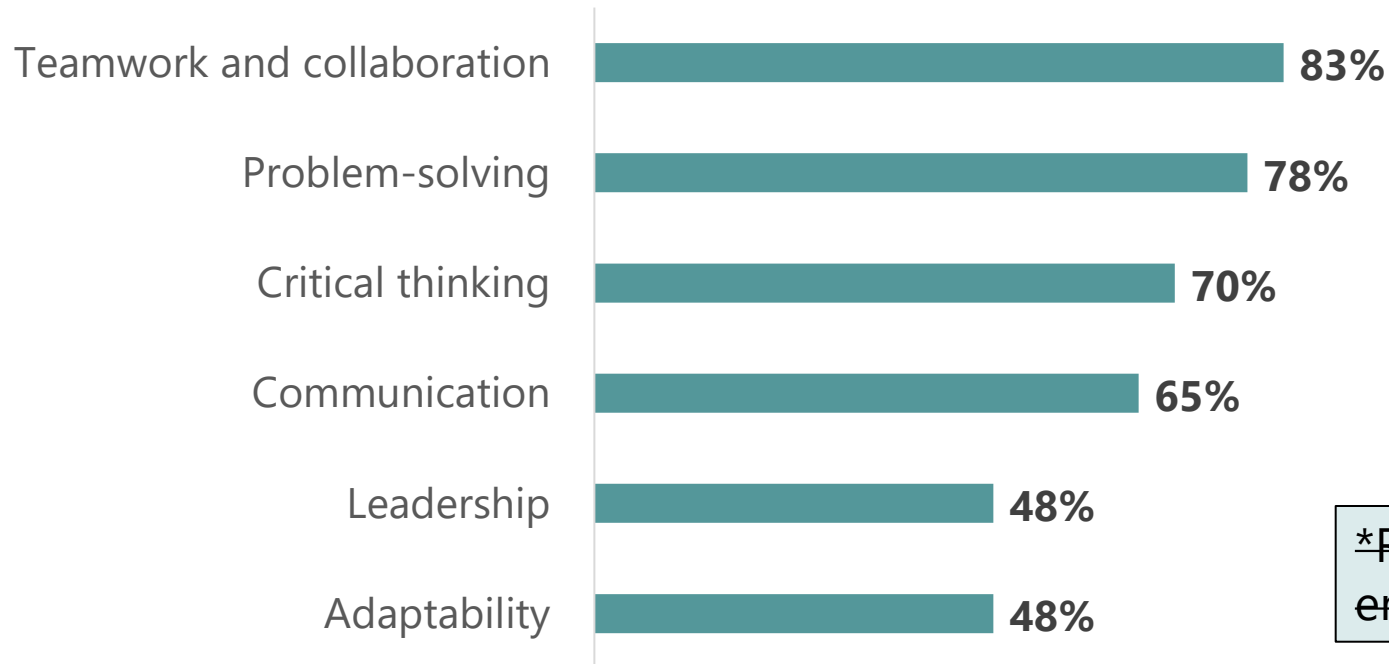
Top In-Demand Skills (LightCast) cont.

Process Improvement	9,904	6%	34,909	8%	+27.0%	Rapidly Growing
Telecommunications	9,602	6%	11,359	2%	+23.4%	Rapidly Growing
Data Analysis	9,176	6%	23,063	5%	+25.8%	Rapidly Growing
Subcontracting	8,906	5%	4,604	1%	+9.4%	Growing
Hand Tools	8,620	5%	756	0%	+6.2%	Stable
Computer Science	8,023	5%	1,184	0%	+26.8%	Rapidly Growing
Safety Standards	7,514	5%	989	0%	+5.9%	Stable
Construction Management	7,493	5%	11,801	3%	+18.4%	Growing



In-demand Soft Skills

Most Important Soft Skills Identified by Surveyed Employers

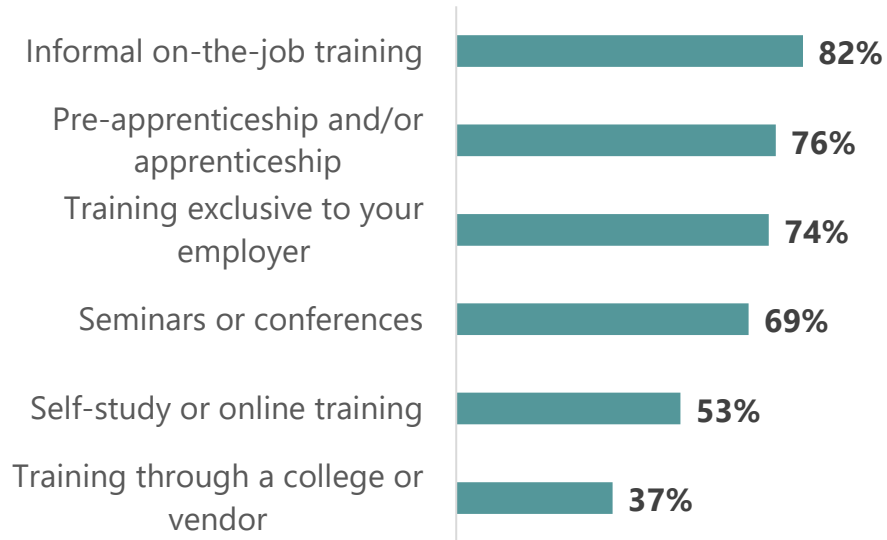


*Reported by
employers

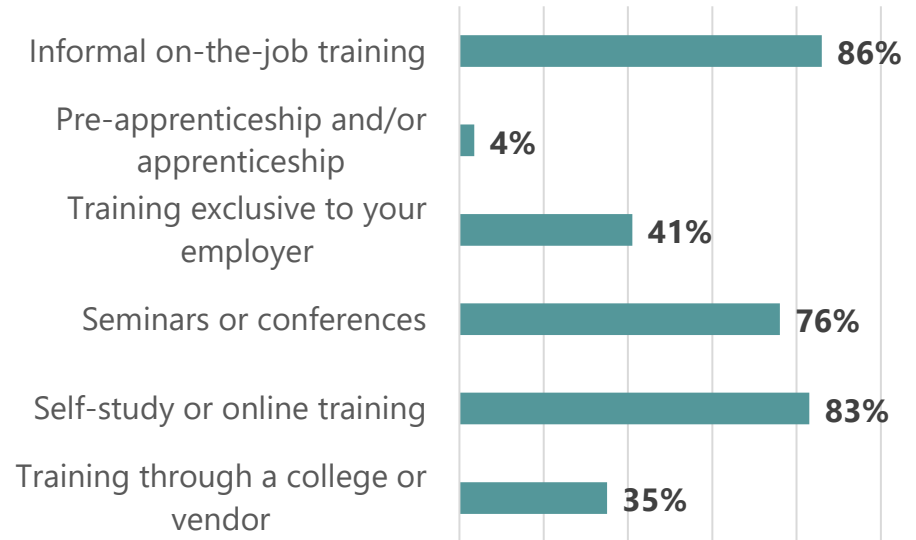


Types of Workforce Development

Types of Training or Professional Development Offered by Employers of Union Represented Employees



Types of Training or Professional Development Offered by Employers of Non-represented Employees





Types of Workforce Development

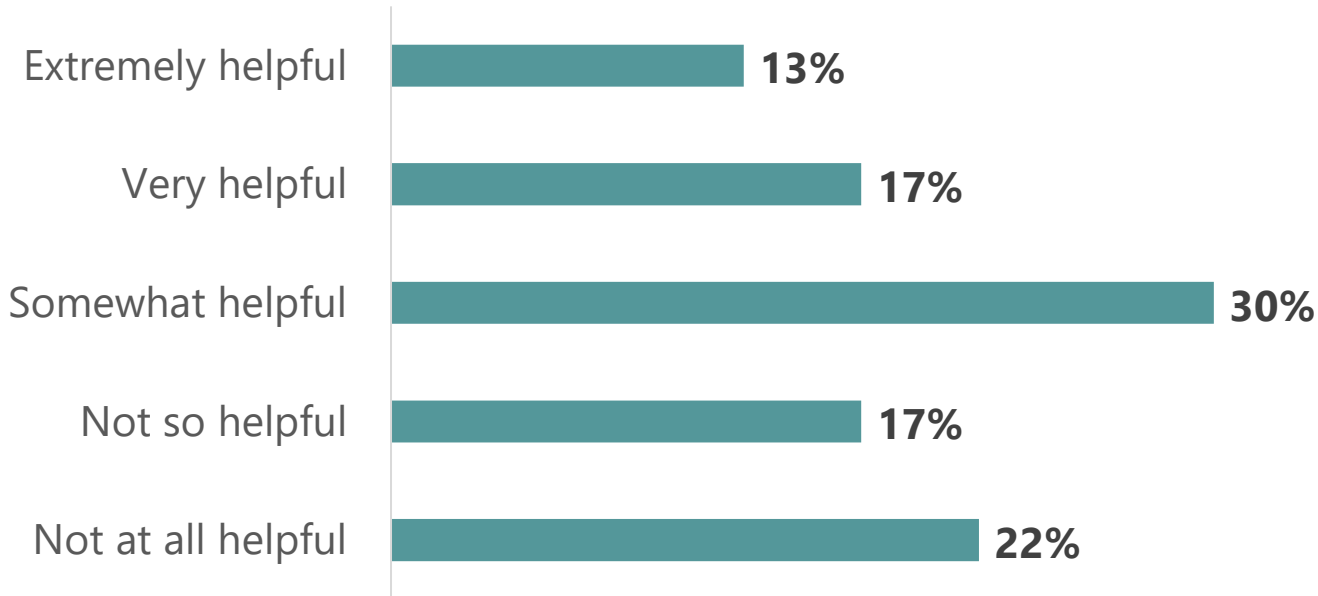
Professional Development Offered by Surveyed Employers





Employer Satisfaction with Training

Satisfaction with Current Training Programs and Educational Institutions at Preparing Workers for Clean Technology Energy Jobs



More than half of surveyed employers (52%) stated they would be interested in partnering with educational institutions to help develop clean energy workforce training programs. However, nearly 9% stated they would not be interested, with 39% being unsure.

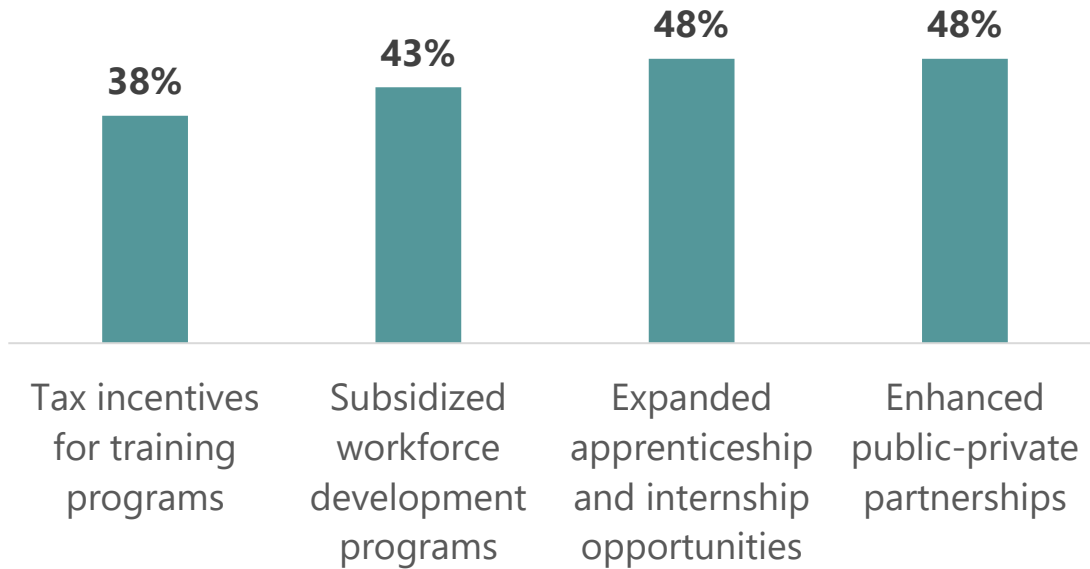
87% of surveyed union-represented employees believed new hires had the necessary skills and training to succeed in the roles.

For new hires, slightly over half of non-union responders (**55%**) believed workers started their role with the necessary skills and training to succeed at their job; 38% were unsure and 7% stated they lacked the needed skills and training.



Helpful Clean Tech Workforce Policies

Helpful Workforce Policies Identified by
Surveyed Employers



29% stated that the current labor pool and talent pipeline are sufficient, with

43% reporting that the workforce does not have the required skills, and

29% also being unsure.



Government Support for Workforce

Other areas of support:

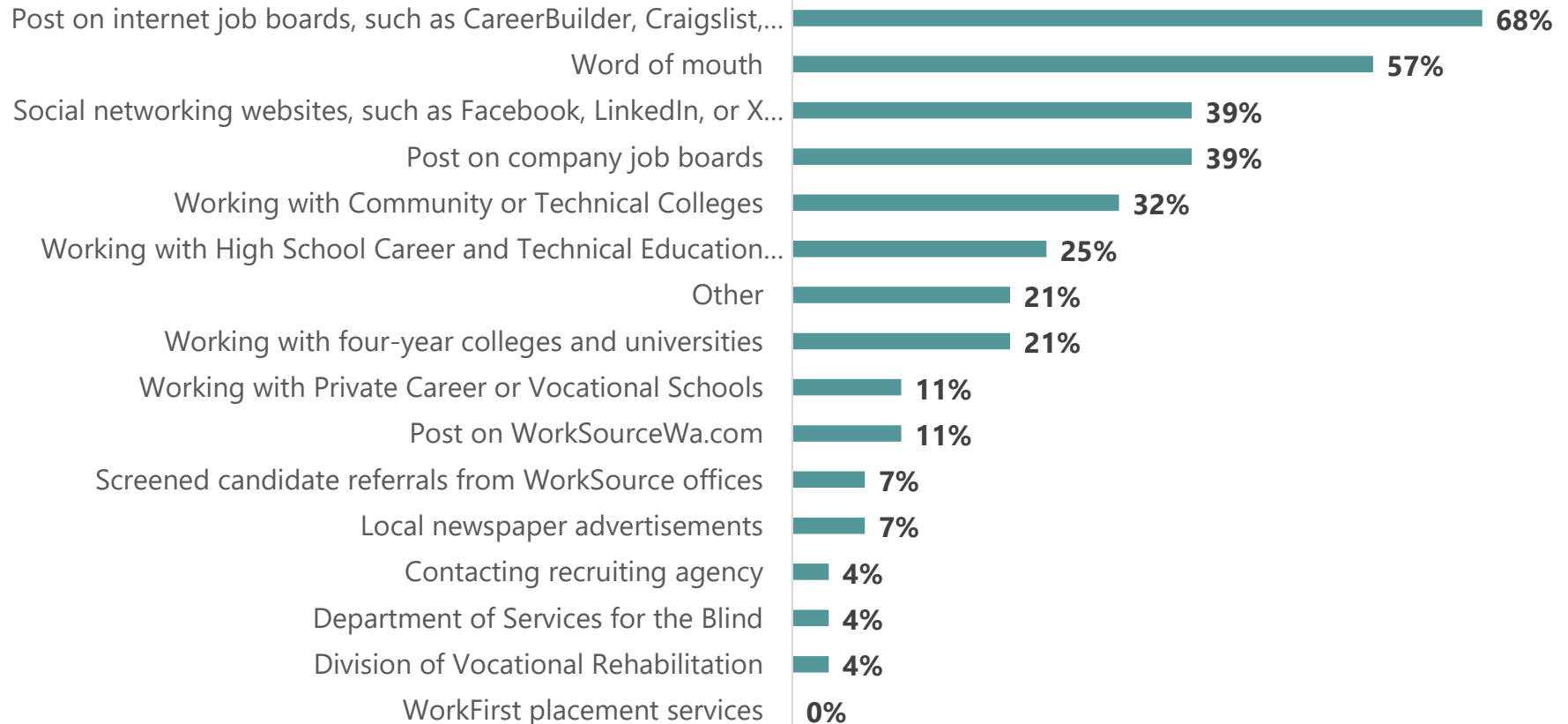
“Expand apprenticeships and internships, make them paid opportunities, develop programs that help the workforce gain "soft skills", and lastly, consider needs beyond the trades.”

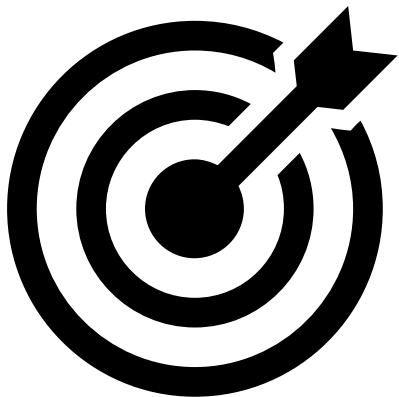
“Restore alternative paths for training electricians, at least until apprenticeship is affordable and easy to access state-wide.”

“Apprenticeship requirements on State mandated clean energy projects”



Employer Recruitment Resources



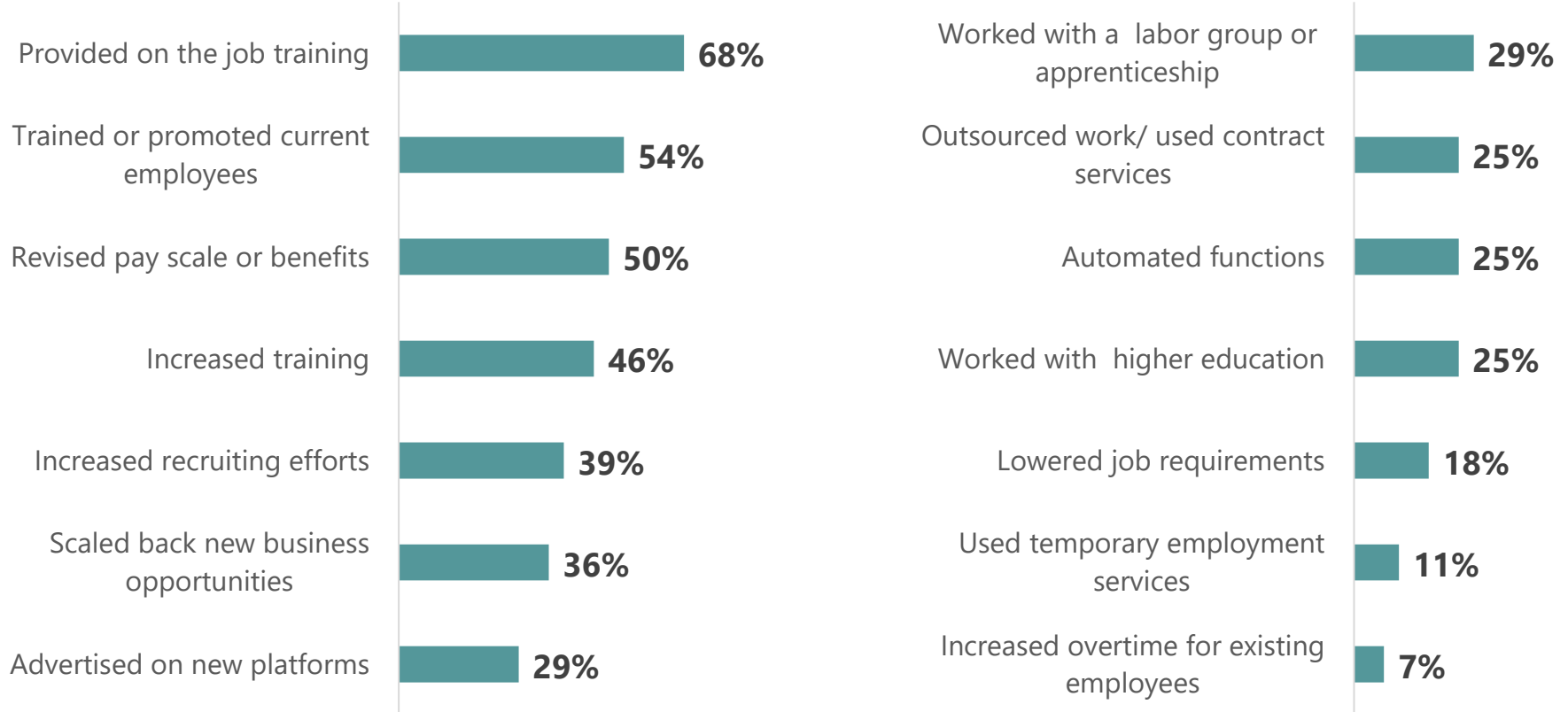


83% of surveyed union-represented employees believed job posting adequately advertised the skills and training needed for their roles.

54% of non-represented employees stated that advertised job openings adequately described the job

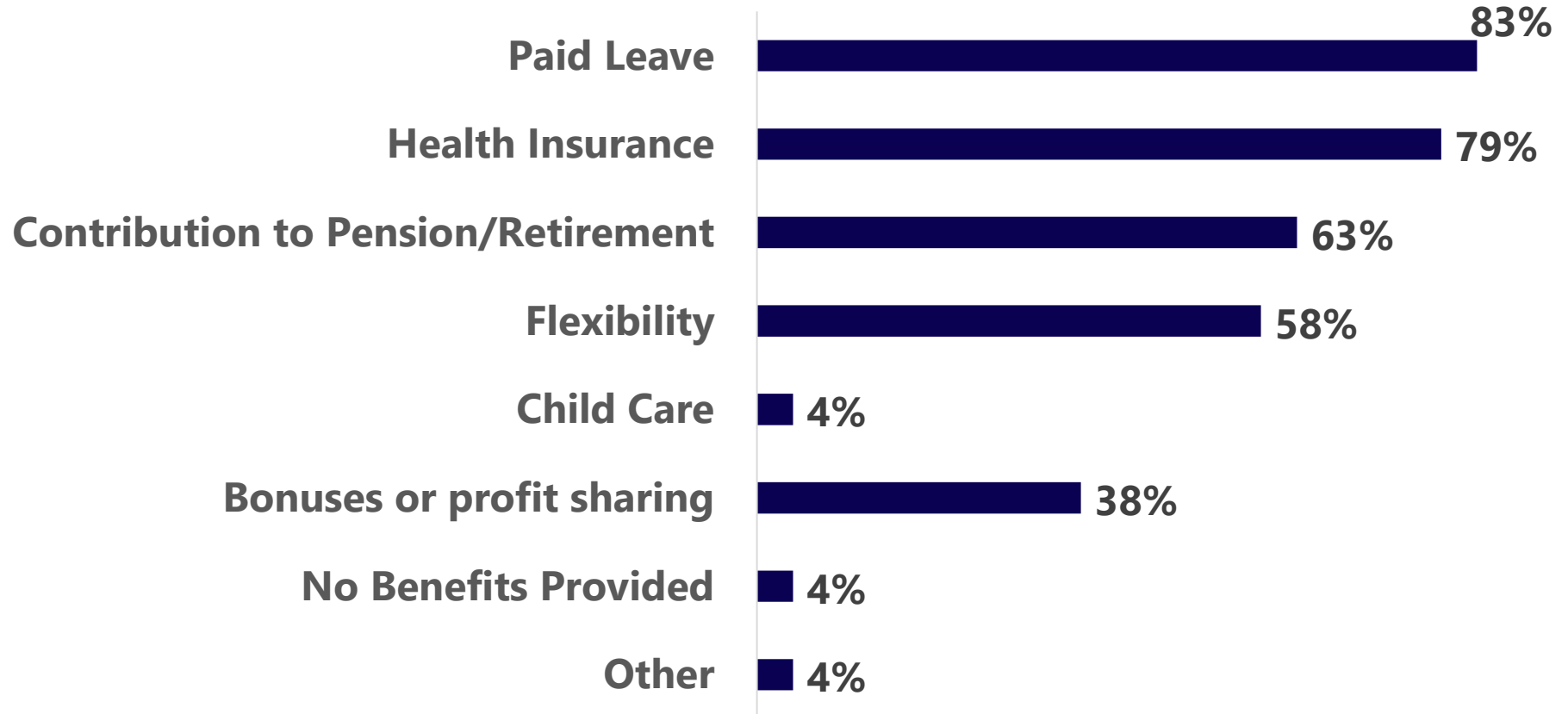


Employer Actions to Address Challenges





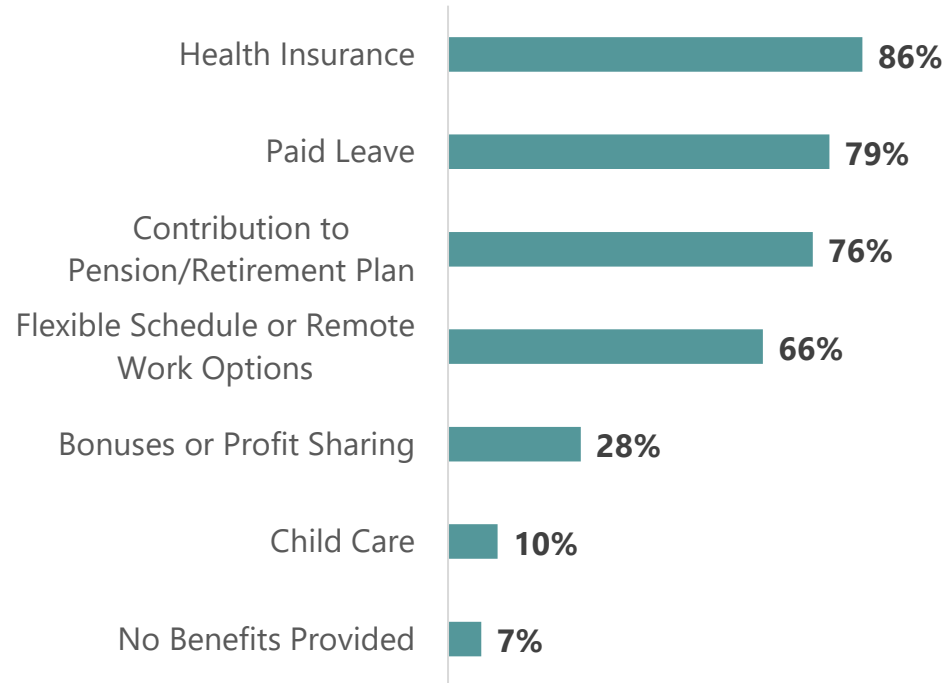
Benefits Provided: Employer Perspective



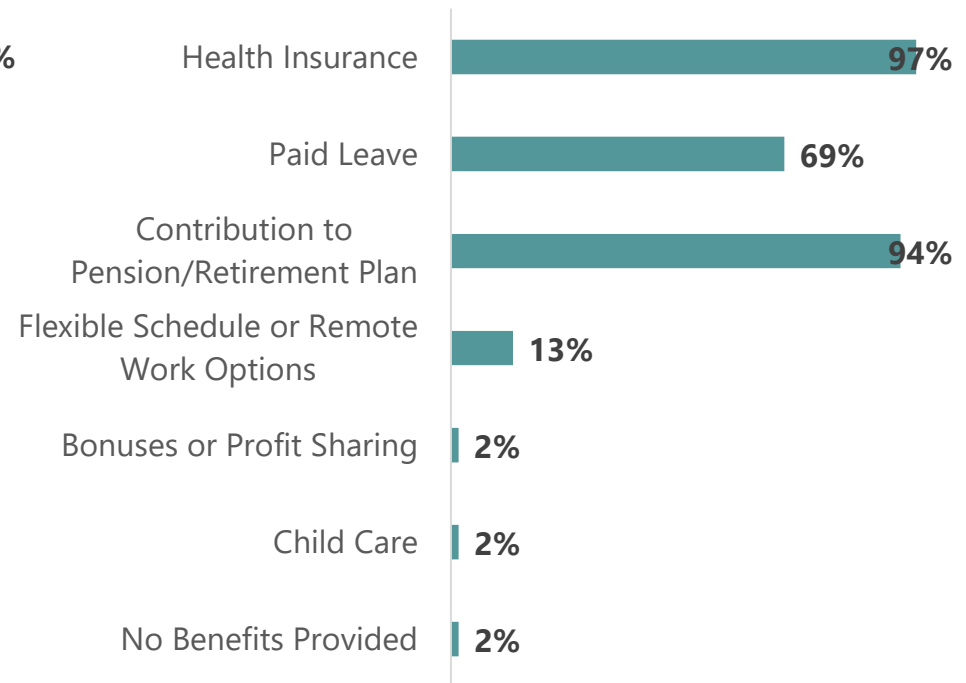


Benefits Provided: Employee Perspective

Non-represented Employee Reported Benefits



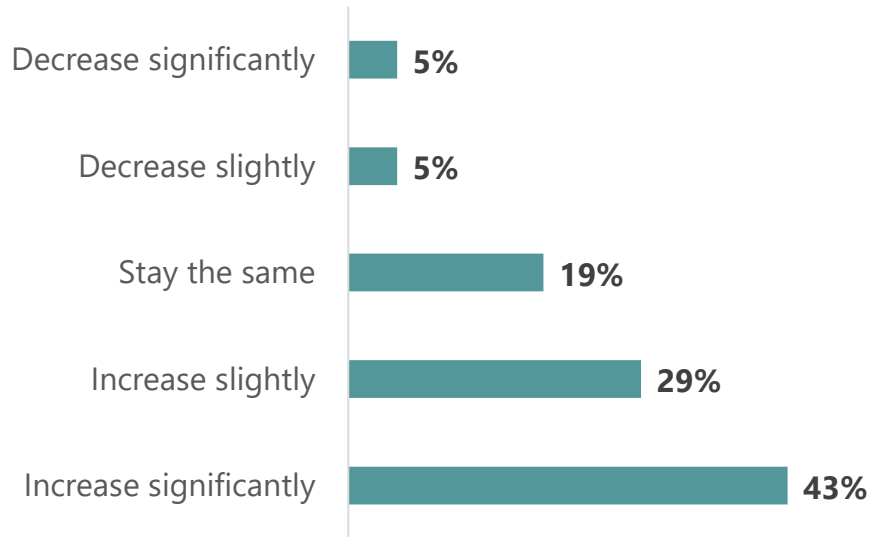
Union-represented Employee Reported Benefits





Future Outlook

Expected Workforce Demand in Clean Technology Energy Job over Next 5 years of Surveyed Employers



Non-represented employee survey responders held mostly uncertain or negative views about their job security. 35% were unsure of their job security in the duration of their career and 19% believed their job was not secure. 46% of survey responders felt their job was secure for the duration of their career.

87% of all concerns about job security were related to changes in the energy economy.

Other reasons included concerns about general economic uncertainty, trade tariffs, Washington State budget cuts, and a lack of federal support.

Questions?

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