

# 2022 Energy Jobs & Market Trends Report

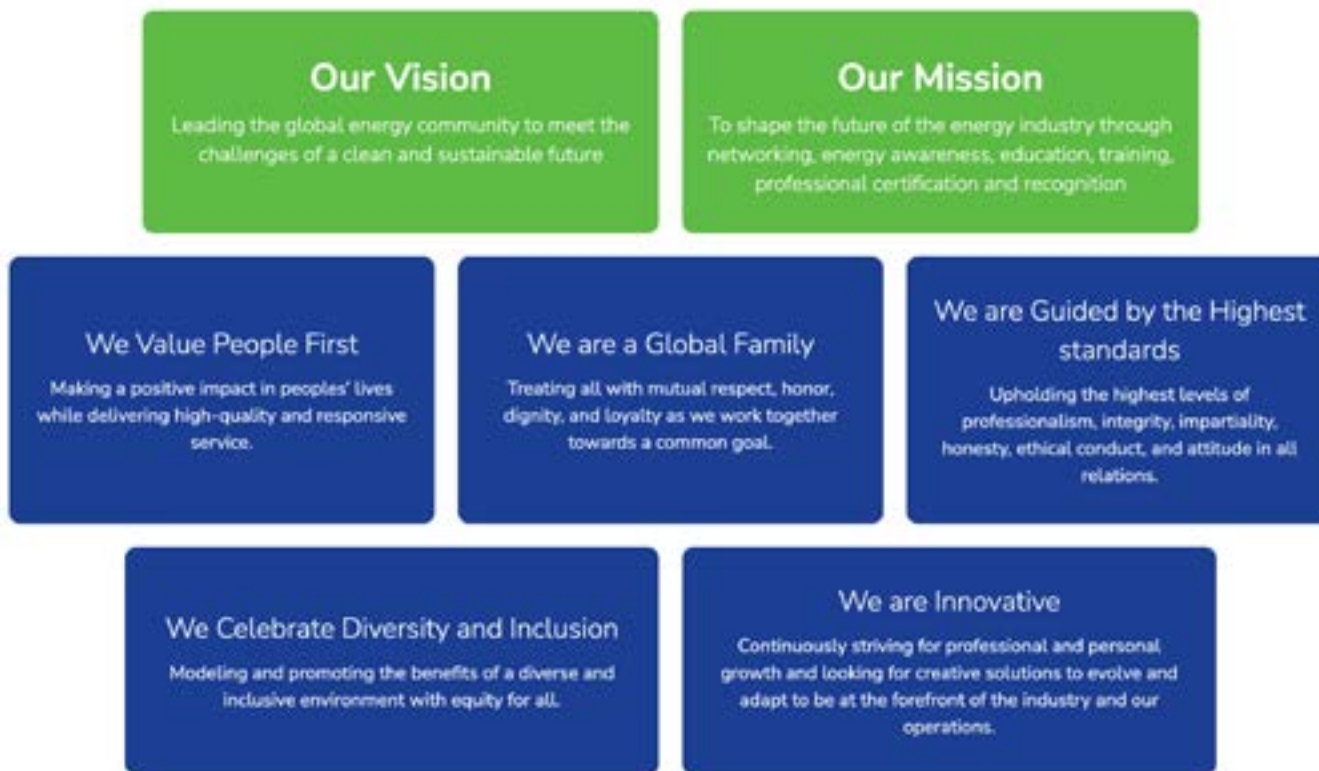


# Energy Managers Since 1977

Over 28,000 professionals in 105 countries trust the Association of Energy Engineers to promote the interests of those engaged in the energy industry and to foster action for sustainable development.

AEE is a non-profit organization dedicated to serving our members and other industry professionals who are working to improve energy efficiency to save energy, reduce GHGs, make buildings perform better, and help reach global goals for net-zero.

The Energy Jobs & Market Trends Report results from an annual survey that aims to identify our members' responsibilities and the impact they are making. It also provides insights into key issues and trends in the global energy market. Over 1,780 energy professionals from 84 countries responded to the 2021-22 survey.





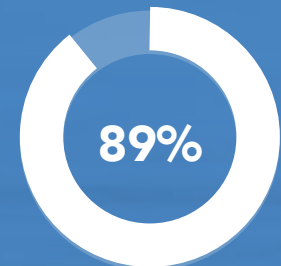
# Demographics and the **Workforce**

The data provided helps identify who our members and certified professionals are, what sectors they work in, and how they view the supply and demand issues in the workforce. This year we have also highlighted the value perceived and gained from involvement with AEE.

Demographics remain unchanged from previous years, and individuals are still active across many sectors. The results signify opportunities for those wanting to develop as energy efficiency and sustainability experts. The results also prove that those involved in the industry value AEE Certifications, training, networking, and conferences.

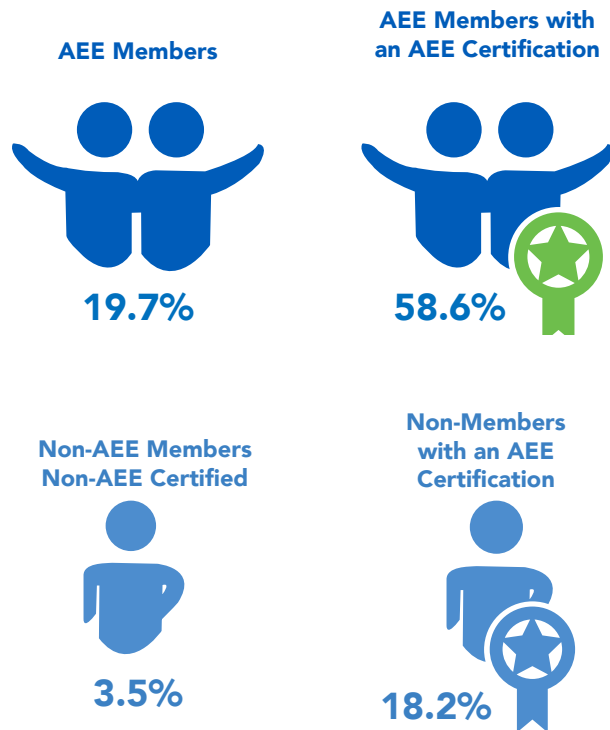
## Who Makes Up AEE?

Owners, Executives, Managers,  
Engineers, and Project  
Professionals



What is Your Relationship with AEE, and What is your Role in Your Company or Organization?

## Who Responds to Our Survey



	Member	Member with an AEE Certification	Non-Member with an AEE Certification	
Engineer	6.3%	<b>21.5%</b>	8.3%	<b>36.1%</b>
Manager	5.6%	<b>16.3%</b>	4.5%	<b>26.4%</b>
Owner	3.0%	<b>8.2%</b>	1.9%	<b>13.1%</b>
Projects/Integration	0.8%	<b>4.5%</b>	0.8%	<b>6.1%</b>
Executive	1.6%	<b>4.0%</b>	1.3%	<b>6.9%</b>
Sales/Marketing	0.6%	<b>2.0%</b>	0.5%	<b>3.1%</b>
Maintenance	0.6%	<b>1.0%</b>	0.3%	<b>1.9%</b>
Education	0.5%	<b>0.3%</b>	0.3%	<b>1.1%</b>
Retired	0.5%	<b>0.5%</b>	0.3%	<b>1.3%</b>
	<b>19.4%</b>	<b>58.3%</b>	<b>18.2%</b>	

Percentage per Role

Percentage per Respondent Group

Non-AEE Member,  
Non-AEE Certified  
3.47% Total

## How Would You Classify Your Company or Organization? Organizations

	Member	Member with an AEE Certification	Non-Member with an AEE Certification	
Consultant	6.5%	19.3%	6.8%	32.6%
Government End User	1.5%	6.9%	2.4%	10.8%
ESCO	1.7%	6.6%	1.6%	9.9%
Utility	1.7%	5.4%	1.2%	8.3%
Contractor	1.8%	5.3%	1.7%	8.8%
Manufacturer	2.4%	4.9%	1.8%	9.1%
Institutional End User	2.0%	4.8%	1.5%	8.4%
Industrial End User	0.6%	3.1%	1.2%	4.9%
Commercial End User	0.6%	1.5%	0.4%	2.5%
	19.3%	58.5%	18.5%	

Percentage per Classification

Percentage per Respondent Group  
Non-AEE Member, Non-AEE Certified 3.61% Total

## What is Your Primary Responsibility in Your Company or Organization? Roles

	Member	Member with an AEE Certification	Non-Member with an AEE Certification	
Energy Efficiency	10.0%	30.8%	9.9%	50.7%
Executive Management	3.4%	8.6%	2.5%	14.5%
Facility Management	2.9%	7.0%	2.7%	12.6%
Sustainability Management	1.5%	4.7%	1.5%	7.7%
Account Management	1.0%	3.4%	0.5%	4.9%
Building(s) Management	1.0%	2.4%	0.5%	3.9%
Energy Procurement	0.1%	1.3%	0.6%	2.0%
	19.9%	58.2%	18.2%	

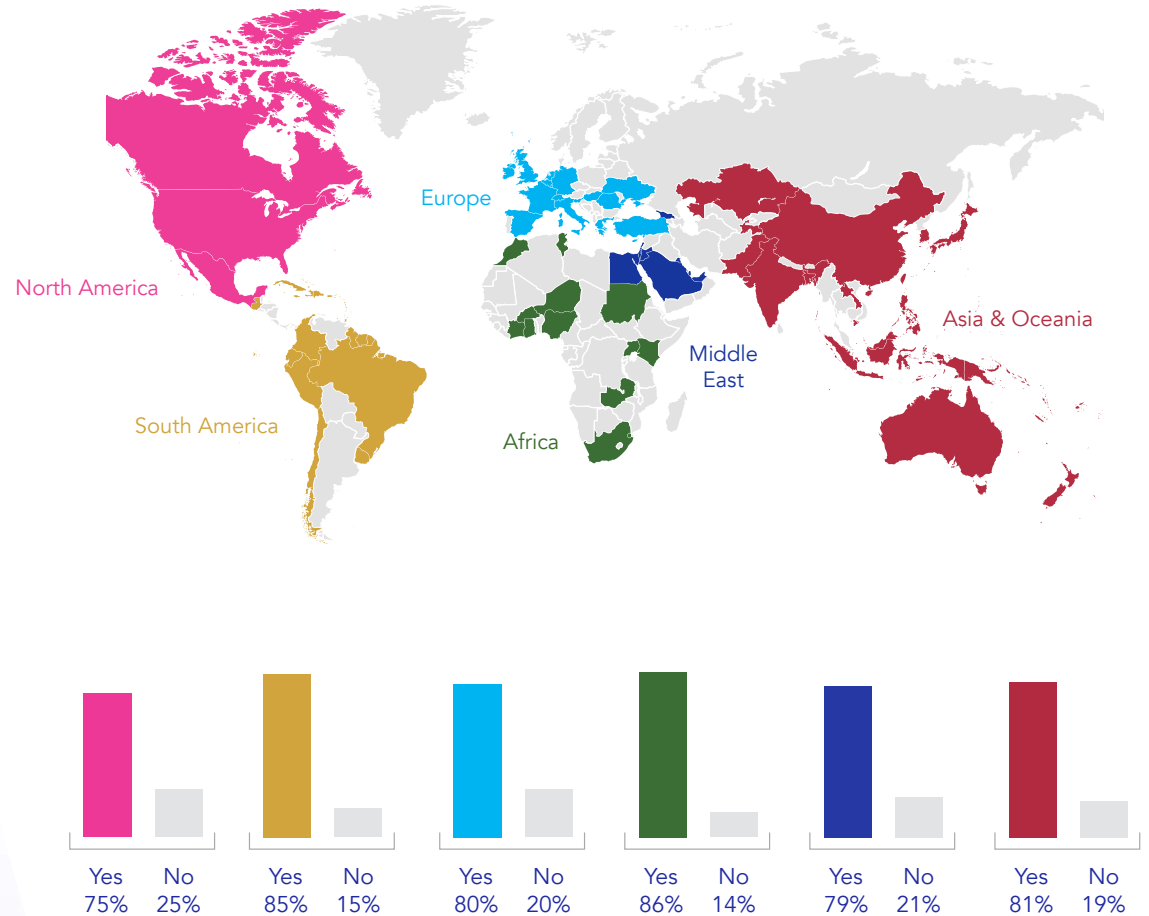
Percentage per Responsibility

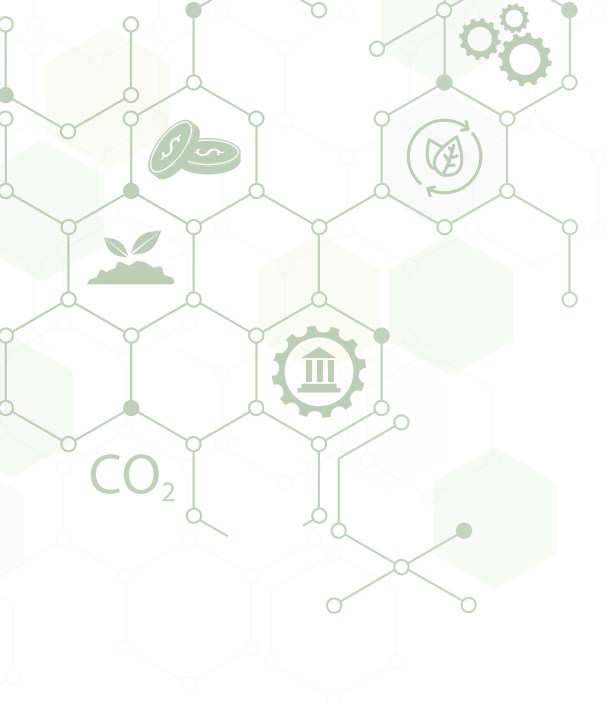
Percentage per Respondent Group  
Non-AEE member, Non-AEE Certified 3.43% of Total

Is there a shortage today of  
energy efficiency professionals?

## Global Energy Professional Demand

Most respondents believe there is a shortage of energy professionals in the current jobs market, with only slight variations across regions.



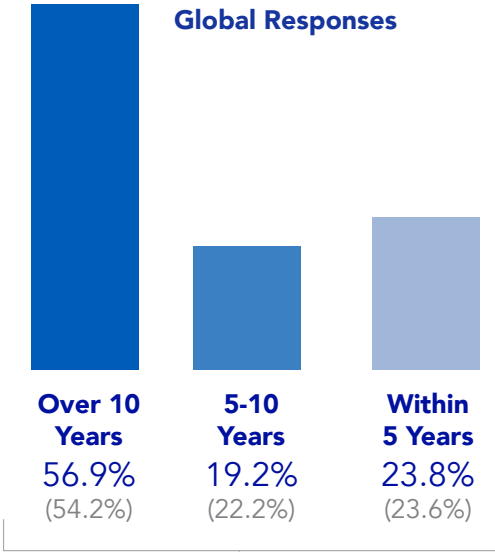


When do you plan to retire?

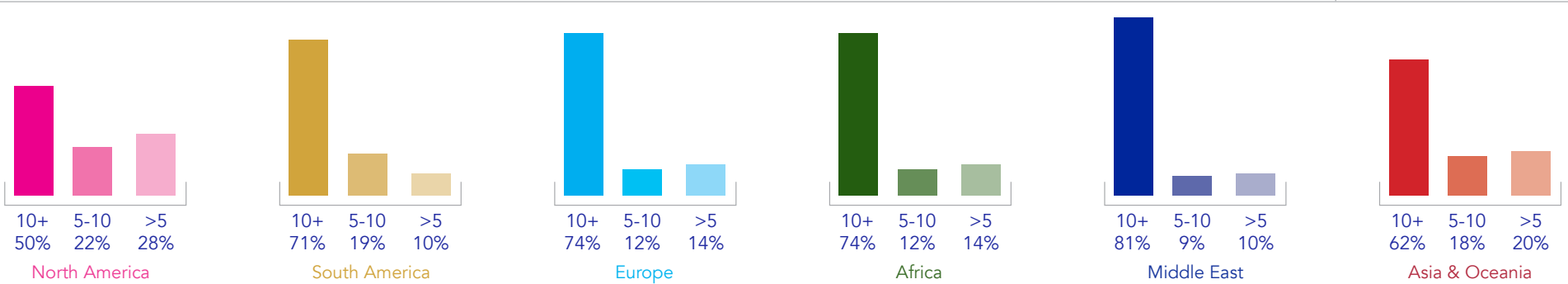
# Leaving the Workforce

Almost a quarter of the workforce plans to retire in the next five years. This factor, in addition to the current shortage of energy professionals, means there will be an influx of opportunities for new professionals to enter the industry.

## Global Responses



## Regional Responses

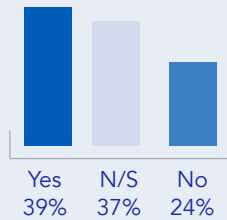


Does your company plan to hire energy professionals in the next 12 months?

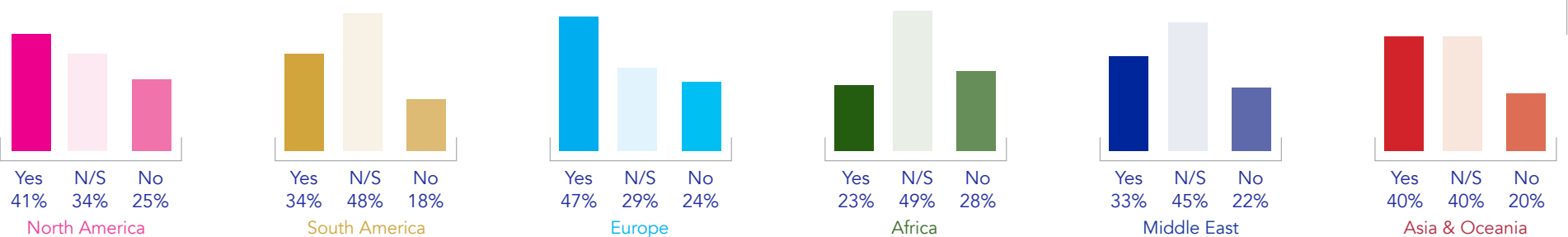
# Opportunities in Workforce

Globally, job opportunities for energy professionals continue to grow in North America, Europe, Asia, and Oceania. Optimism is not as high in Africa, the Middle East or South America. Industries that indicate significant hiring plans in the coming year include ESCOs, Utilities, Consultants, and Contractors.

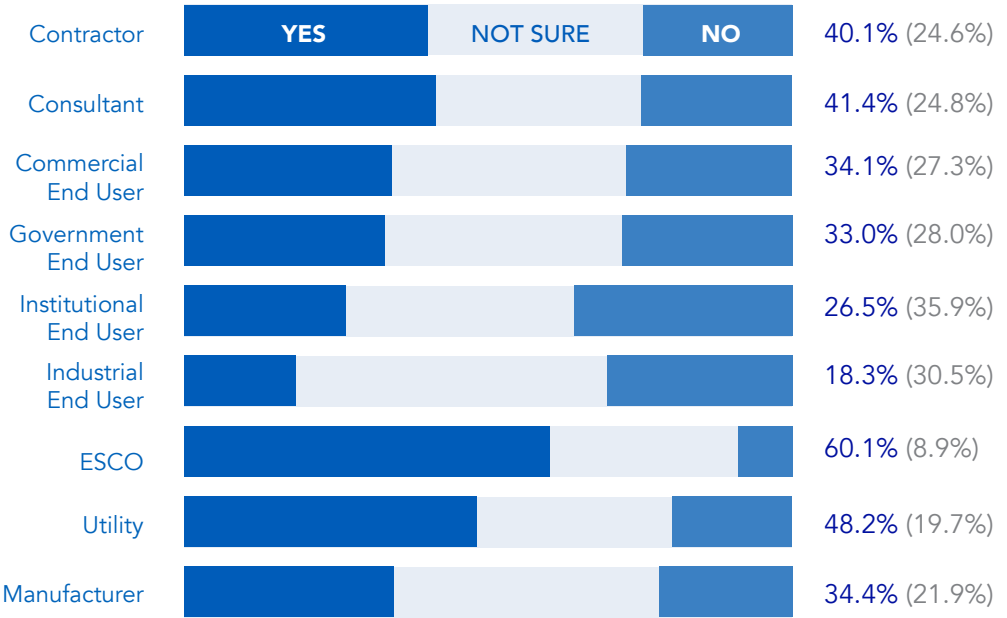
Global Responses



Regional Responses



Responses by Sector

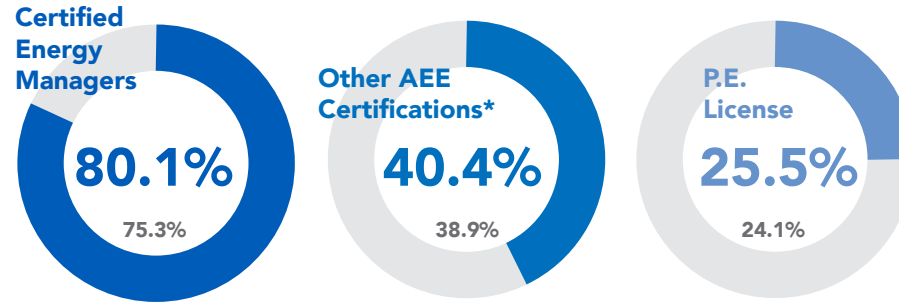




What credentials do you hold?

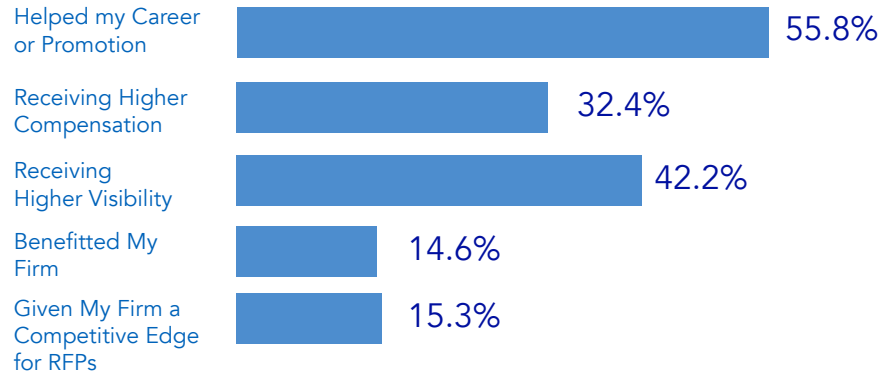
## Industry Certifications

Year after year, we continue to see a large portion of AEE Members and professionals that keep an AEE Certification also hold the engineering profession's highest standard licensure - P.E. (AKA P.Eng or Registered Engineer). Overall, obtaining a professional certification is reported by over 55% to help an individual's career.



Comparison with the results from the 2019 AEE Market Trend Survey

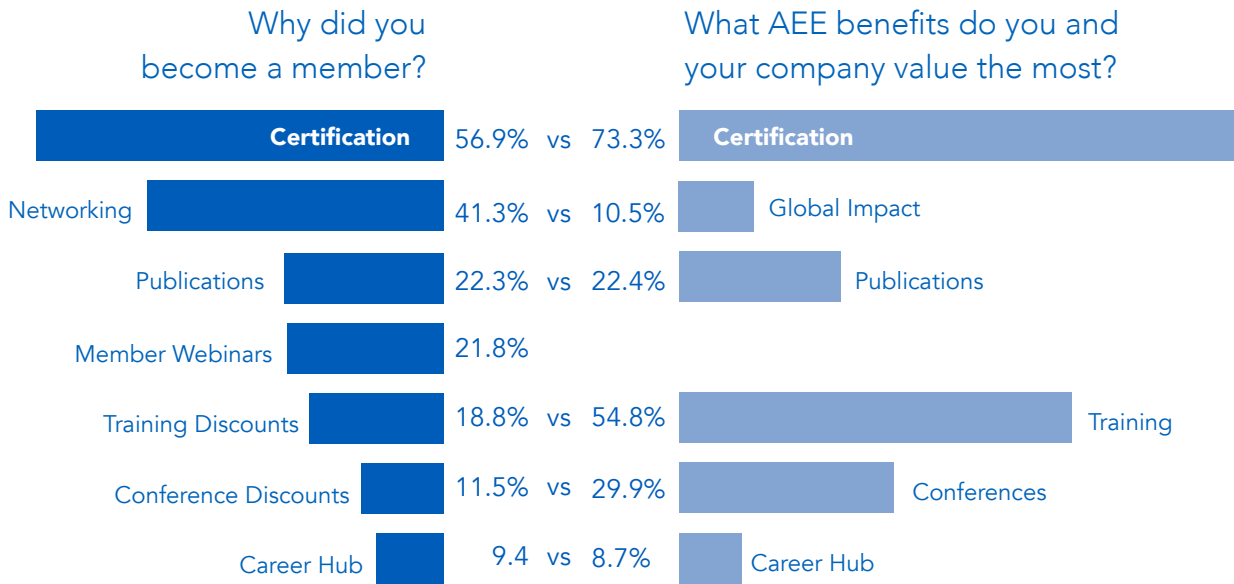
Which of the following have been achieved since gaining an AEE certification



Why do our members join and what AEE benefits do they value?

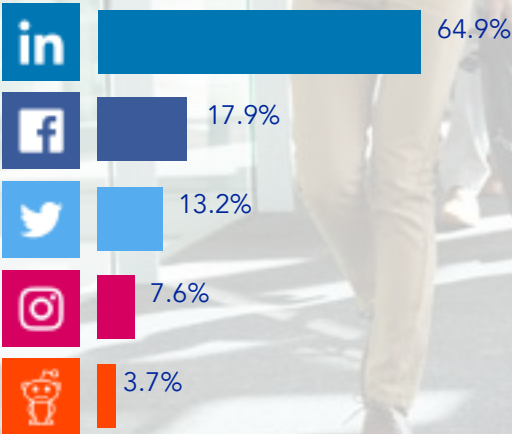
# The Value of AEE Membership

AEE Certifications and networking are both significant driving forces behind becoming an AEE member. Once becoming a member, the most valued benefits are found to be sharing of industry knowledge and innovations through certification, training, conferences and publications. AEE monthly member webinars have increased in popularity for providing industry updates and a source of Continuing Education Units (CEU).



Which social media platforms do our members use for energy related news?

## Find AEE Members Online





# Industry Experience & Compensation

The data collected provides insight into energy efficiency professionals' education, experience, and compensation, and it identifies the value of the work they perform. For 2022 we have highlighted the difference between global regions to allow you to measure against your cohort and look across the industry worldwide.

While the US leads financially, we can see there is potential for energy professionals in every region and to the highest levels. Young energy professionals are increasingly entering the workforce in Asia, Africa, the Middle East, and South America.

## Annual Merit Bonus

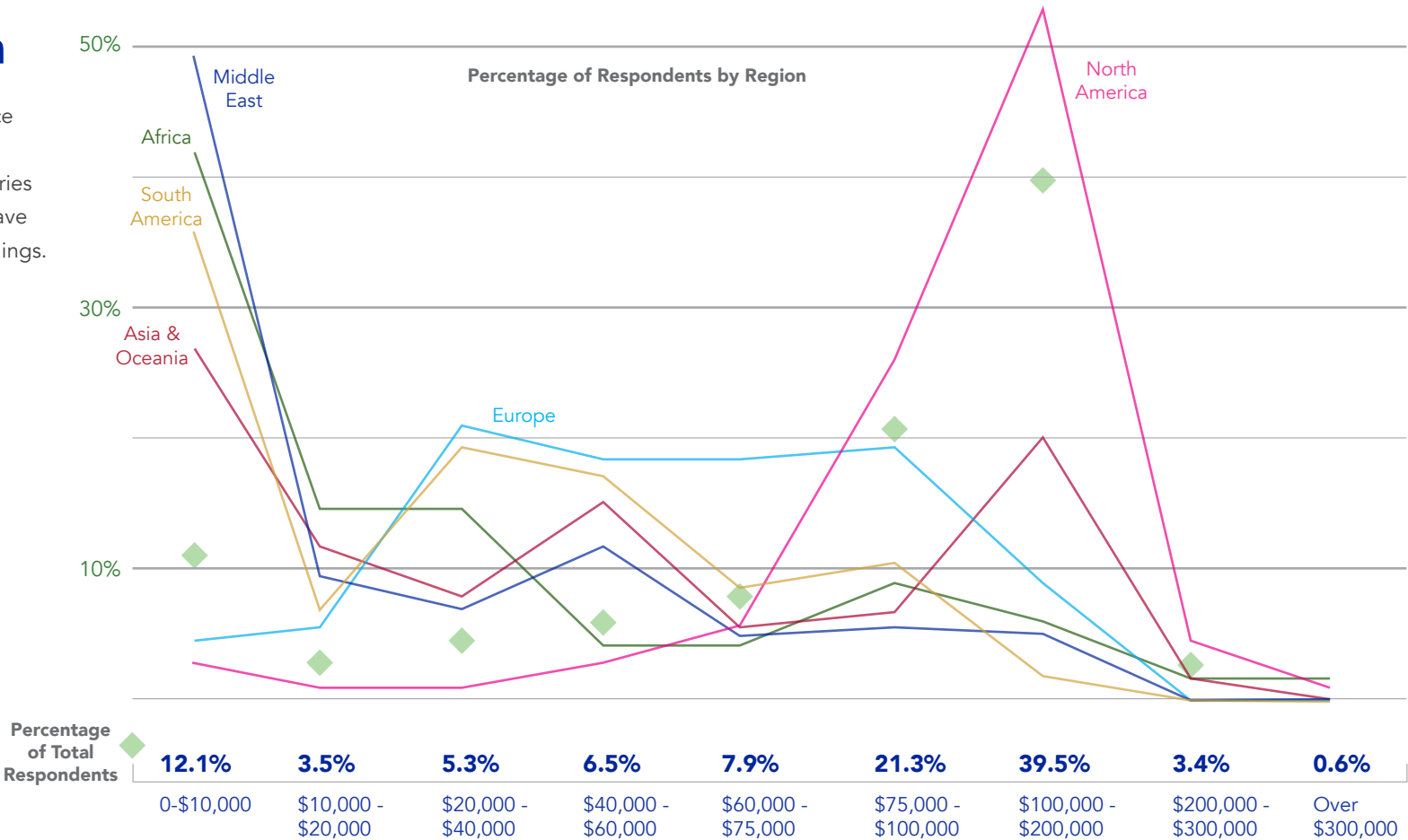
Certified Energy Managers (CEM®) take home 80% of the total volume of all merit bonuses received by survey respondents.



# What is Your Base Salary?

## Compensation

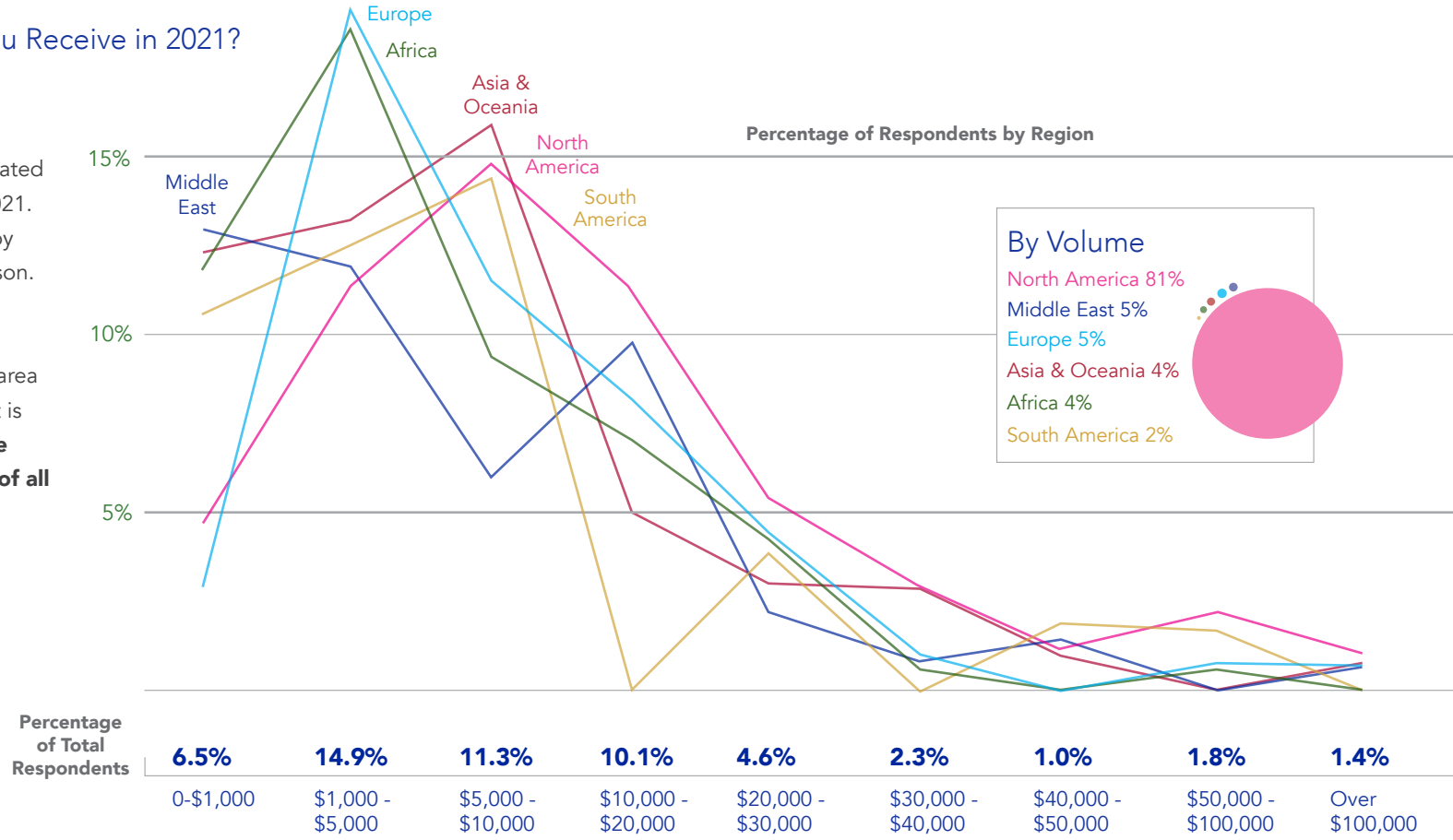
The responses show the difference in compensation levels between global regions. The US leads salaries worldwide, but other areas still have the potential for exceptional earnings.



What Merit Bonus Did You Receive in 2021?

Merit Bonus

Over half of all respondents indicated they received a merit bonus in 2021. The percentage of respondents by region allows a regional comparison. The US/International difference is realized when you consider the number of respondents for each area and is shown below by volume. It is also worth noting that **CEMs take home 80% of the total volume of all merit bonuses.**



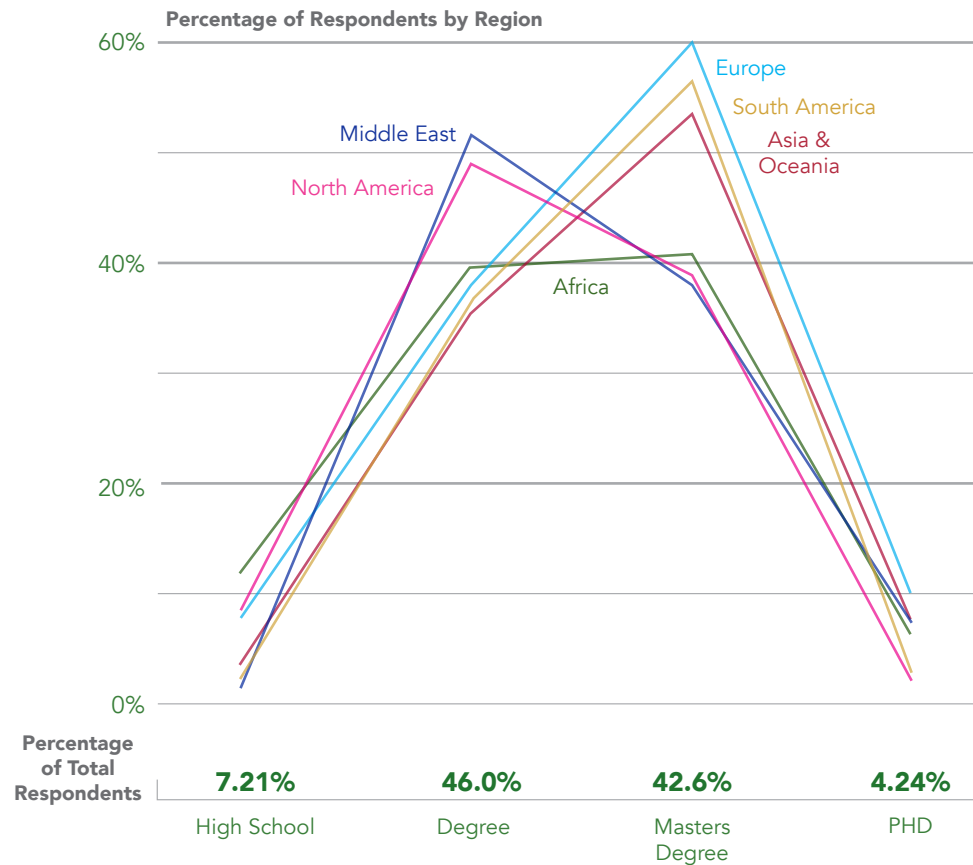
What's your highest level of education achieved?

## Education

The majority (92.84%) of respondents have university-level education.

We see a marked difference between the US, the Middle East, and

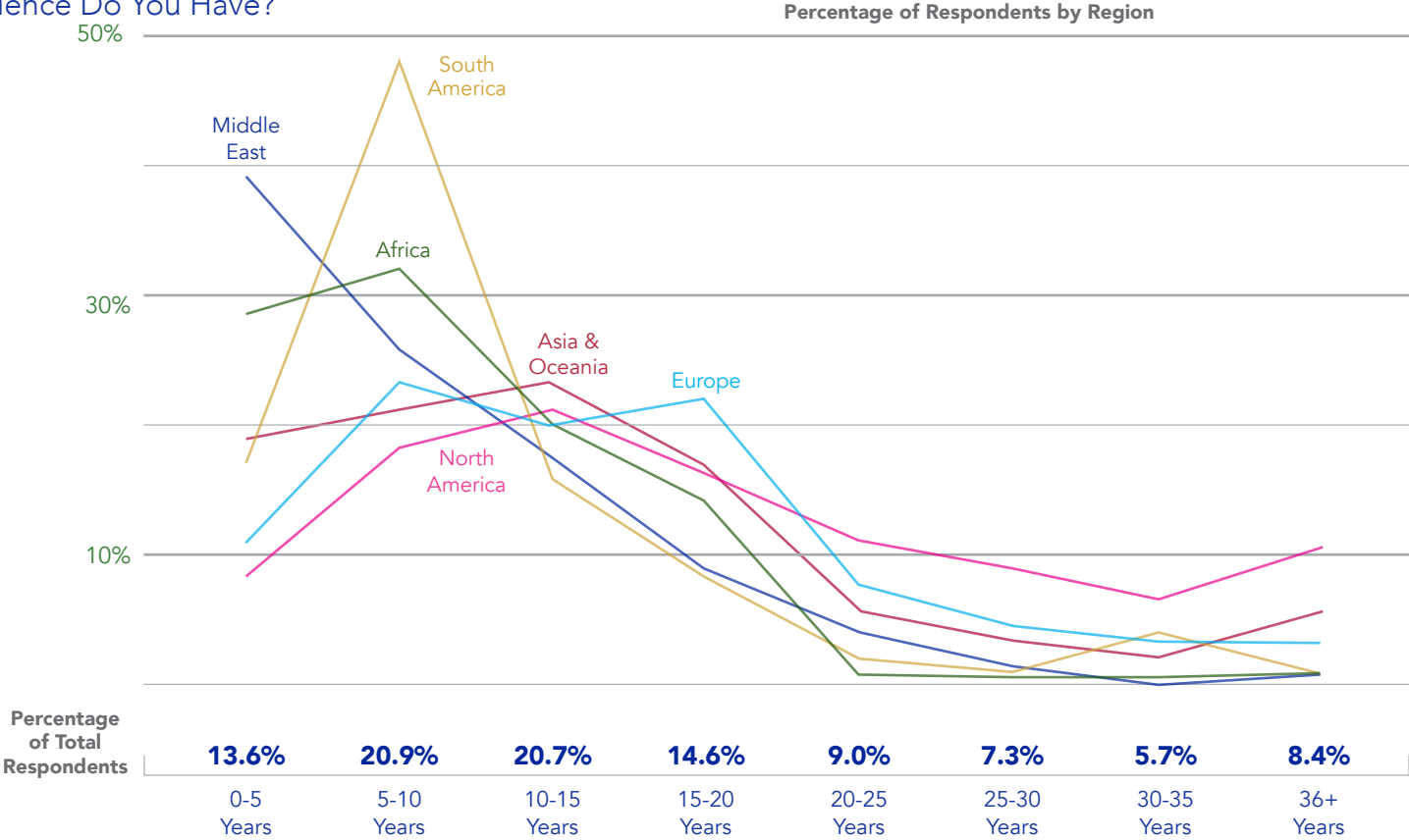
other regions and how these regions' trends are similar.



How Many Years of Industry Experience Do You Have?

Experience

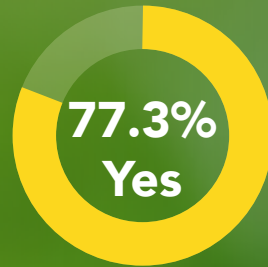
The results in this survey are from a wide variety of industry professionals, with the highest response rate from those with five to 15 years of experience. It is also a positive trend to see over 13% of respondents from the under five years of experience category, to hear what the latest trends and innovations are looking like for the future industry leaders.



# Our Members Influence Change

We wanted to measure how involved or influential energy professionals are in their organization's strategic energy efficiency and sustainability goals. The data shows relative awareness, the factors driving change, and the financial impact. It also shows how energy managers focus on global environmental concerns, particularly reducing carbon to help achieve net zero.

Do you make or influence  
your organization's energy  
efficiency decisions?

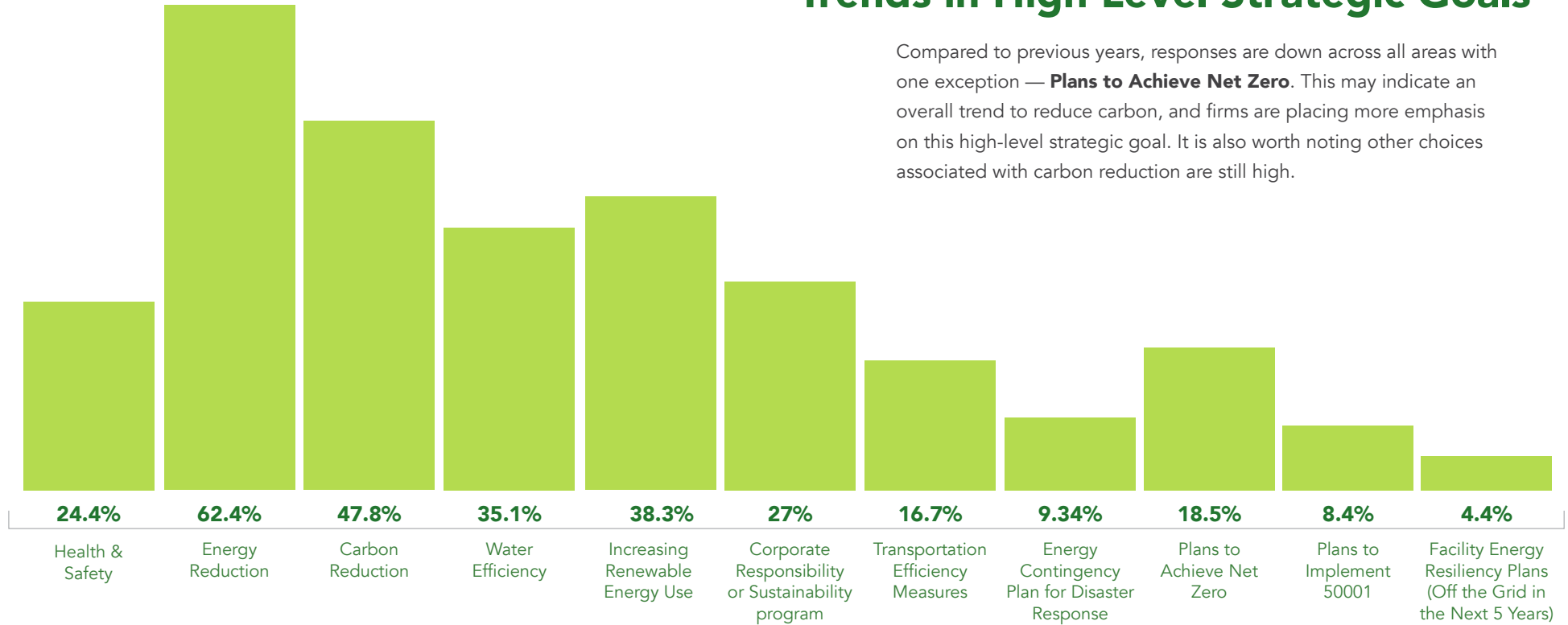




Post COVID 19, what are your company's strategic goals for addressing energy efficiency?

## Trends in High Level Strategic Goals

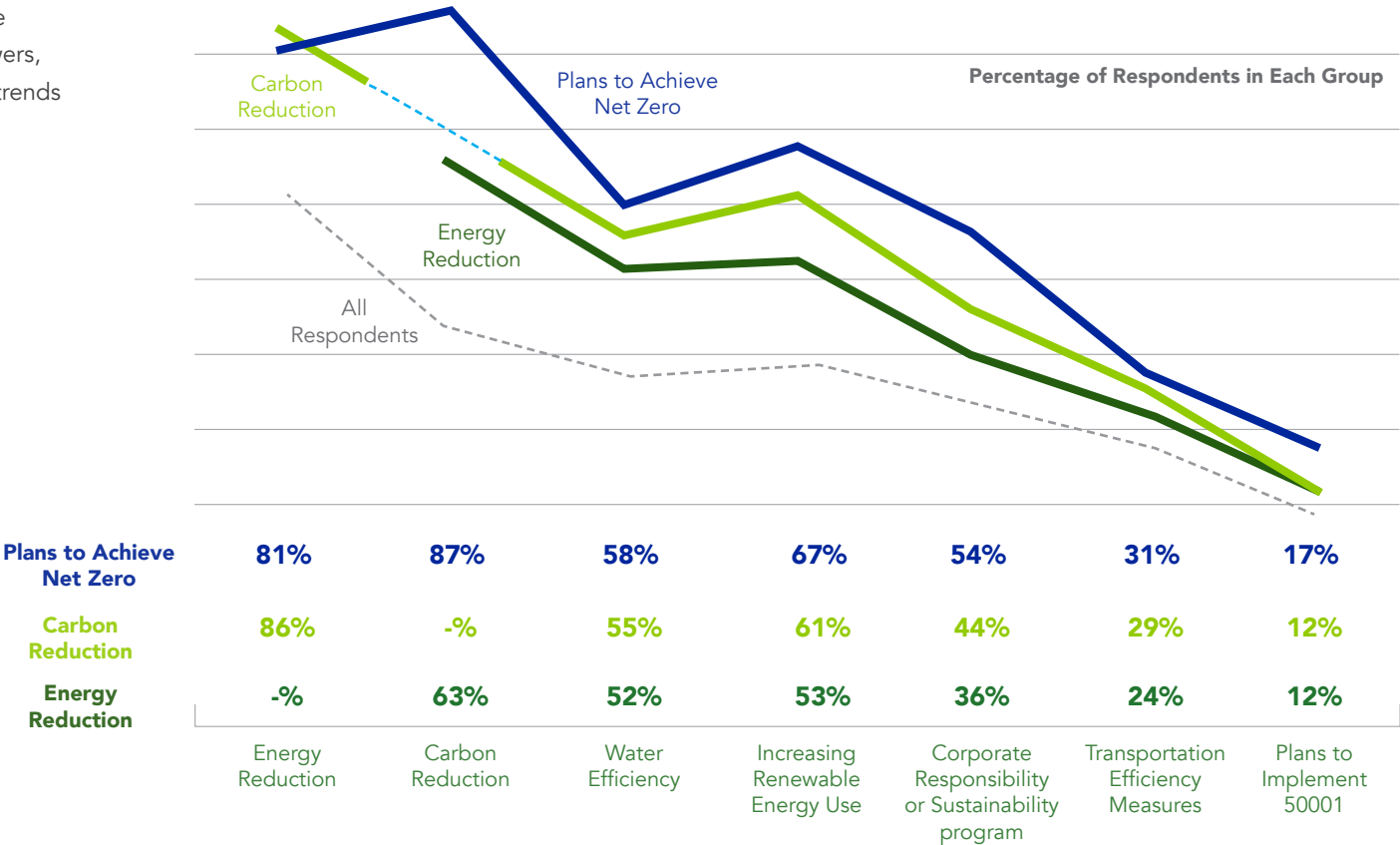
Compared to previous years, responses are down across all areas with one exception — **Plans to Achieve Net Zero**. This may indicate an overall trend to reduce carbon, and firms are placing more emphasis on this high-level strategic goal. It is also worth noting other choices associated with carbon reduction are still high.



Post COVID 19, what are your company's strategic goals for addressing energy efficiency?

# Trends in High Level Strategic Goals

When we isolate the responses of three of the previous groups and compare that to all answers, we can also see **Plans to Achieve Net Zero** trends highest in each area.



We asked about issues we hear our members discussing.

## Getting More Specific

Respondents indicated that decarbonization and achieving net-zero goals drive their work. EV charging is a strategy energy engineers are investigating to decarbonize, but it brings issues that must be addressed.



### Getting specific — Did they agree?

My company and work are being driven by my decarbonization and net-zero goals.

18.9%

Disagree

57.9%

Agree

(23.2%)

N/A

I am dealing with grid capacity issues.

30.5%

Disagree

33.2%

Agree

(36.3%)

N/A

EV charging is part of my grid and decarbonization initiatives.

21.5%

Disagree

43.4%

Agree

(35.1%)

N/A

Respondent dealing with grid issues, EV charging is part of their initiatives

**63%  
Agree**

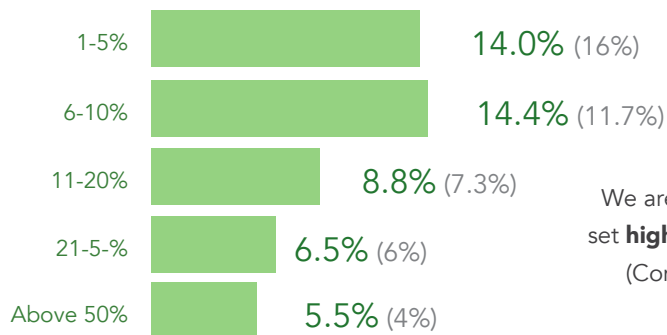
**49%  
Agree**

Respondent that are implementing EV charging initiatives are having grid issues.

# Following a Trend, Making Changes, or Lagging Behind?

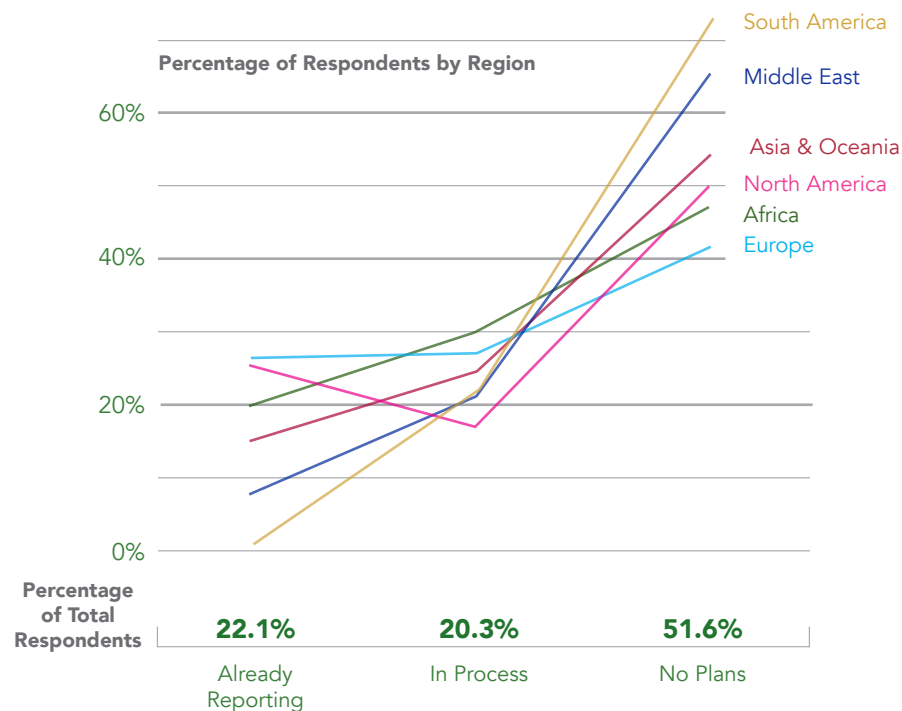
Environmental, Social, and Governance policies (ESG) are not yet mainstream globally. With over 50% of our members' responding with no plans for ESG reporting, it clarifies that there is a need for strategic planning in this area. There is also an overall higher average of renewable energy use targets in 2022 when compared to 2019.

If you are implementing renewable energy use targets, what level of your total energy usage are you trying to replace in 2022?



We are seeing a trend to set **higher targets** in 2022.  
(Compared to 2019)

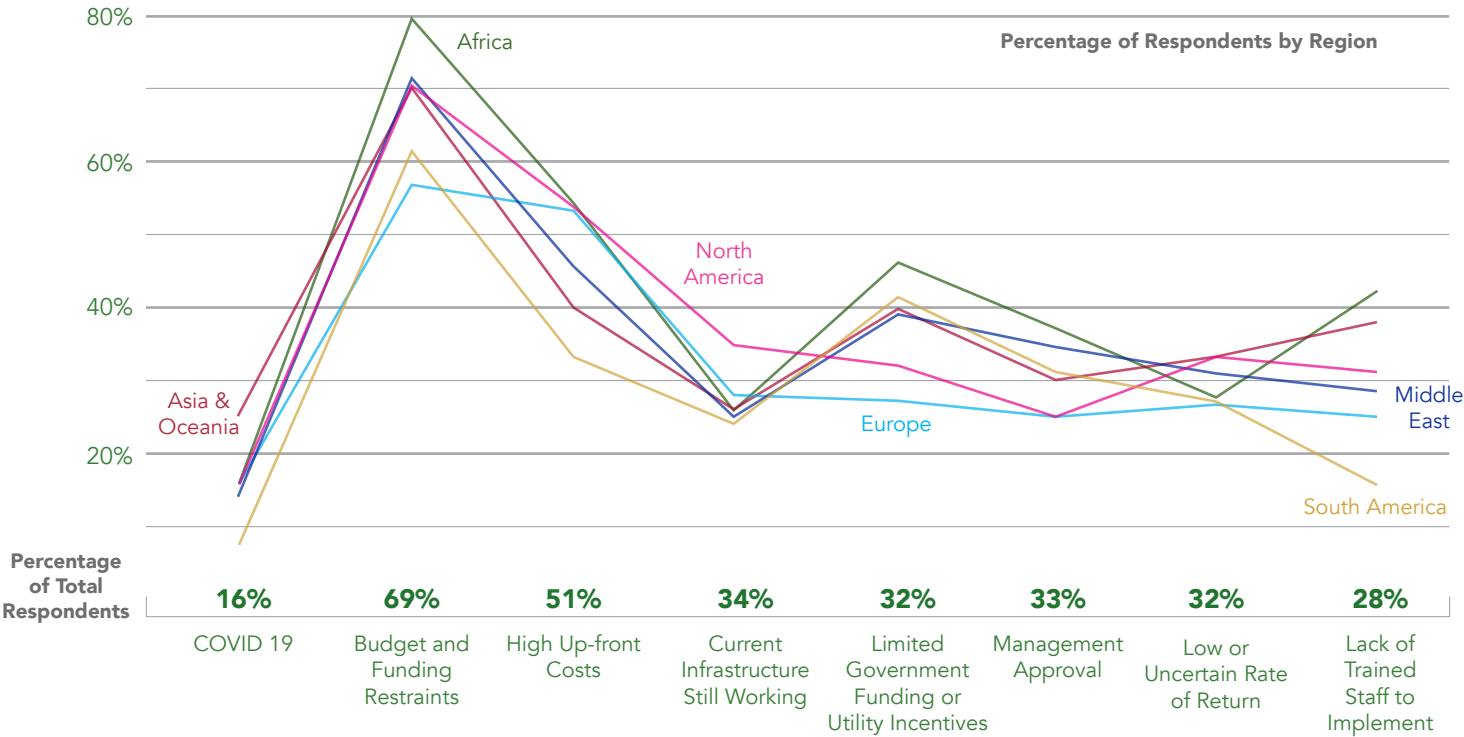
Does your company have a plan for ESG reporting?

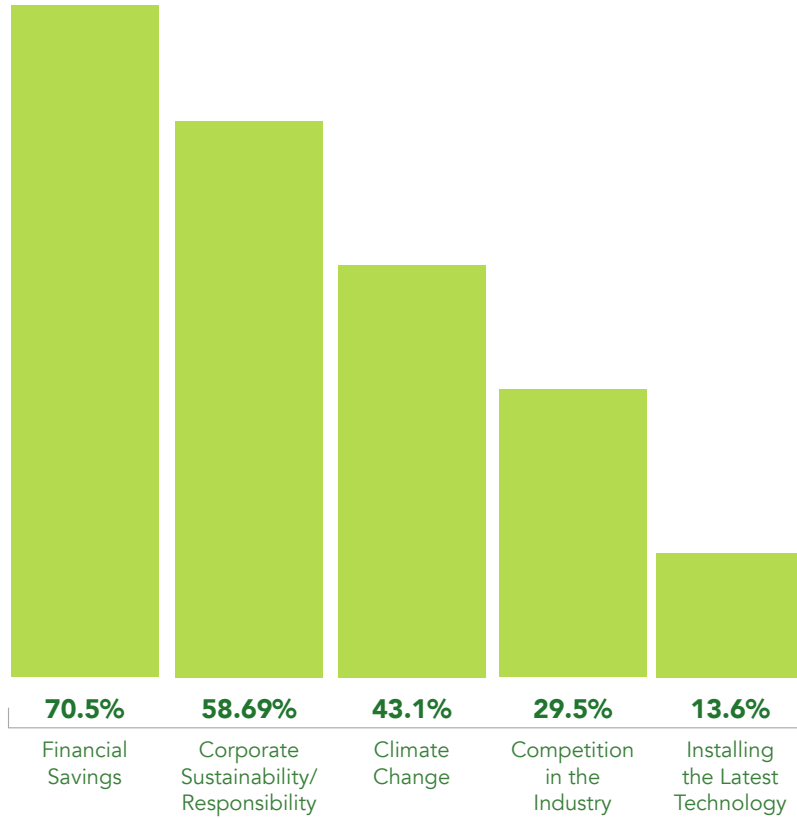


What are the most significant challenges to increasing energy efficiency and sustainability?

# Challenges You Face

The graph shows regional differences in challenges energy engineers face. COVID 19 presented unique issues to our industry, and the answers show two significant regional differences; South America and Asia. Africa continues to be challenged by financial factors and workforce development. Europe sees fewer issues overall compared to other regions.

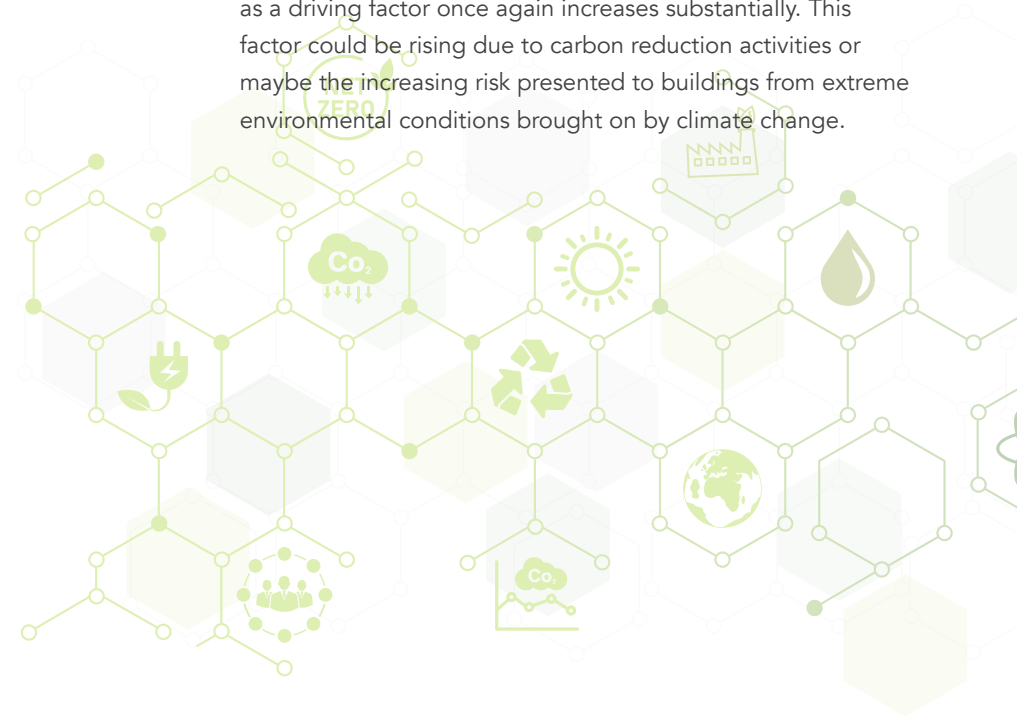




What's driving your company's energy efficiency programs?

## What's Driving Change

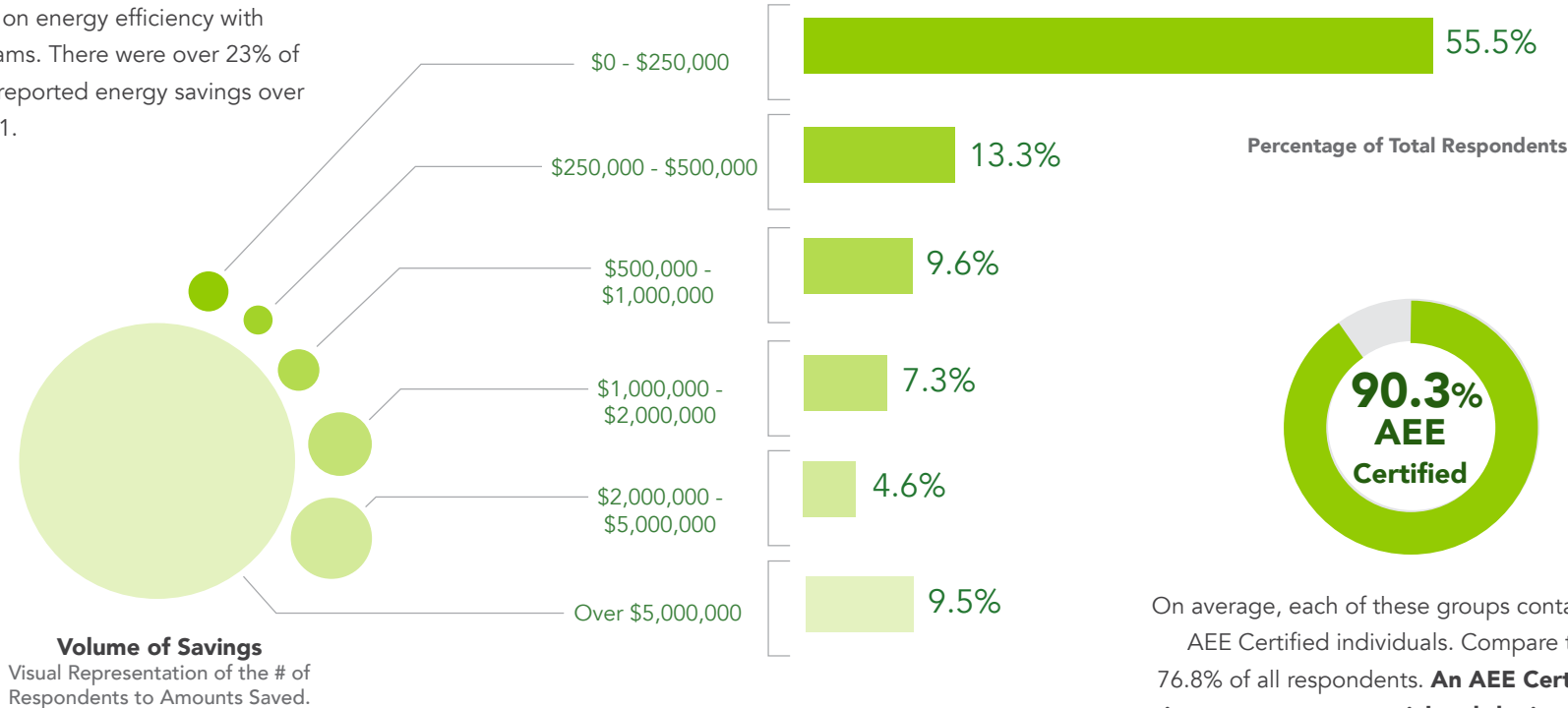
Financial Savings is still the primary factor that drives energy efficiency programs and projects. But, we see a reduction in responses for the first time in several years. Climate Change as a driving factor once again increases substantially. This factor could be rising due to carbon reduction activities or maybe the increasing risk presented to buildings from extreme environmental conditions brought on by climate change.



How much money has your company saved as a result of its energy efficiency or sustainability programs in 2021?

# Impacting the Bottom Line

All respondents have successfully continued making an impact on energy efficiency with established programs. There were over 23% of respondents who reported energy savings over \$1,000,000 in 2021.



# Appendix | Country Data | Individuals from 84 countries responded to the 2021-22 Annual AEE Survey.

Antigua & Barbuda	Georgia	Macau	Spain
Argentina	Germany	Malaysia	Sudan
Australia	Ghana	Maldives	Swaziland
Bahamas	Gibraltar	Mauritius	Switzerland
Bahrain	Greece	Mexico	Taiwan
Bangladesh	Guam	Morocco	Tajikistan
Barbados	Guatemala	Namibia	Trinidad & Tobago
Belgium	Guyana	New Zealand	Tunisia
Bermuda	Hong Kong	Nigeria	Turkey
Brazil	Hungary	Pakistan	Uganda
Bulgaria	India	Palestine	Ukraine
Burkina Faso	Ireland	Peru	United Arab Emirates
Canada	Israel	Philippines	United Kingdom
Chile	Italy	Portugal	United States of America
China	Jamaica	Qatar	Uruguay
Colombia	Japan	Romania	Vietnam
Côte d'Ivoire	Jordan	Saudi Arabia	Virgin Islands, U.S.
Cyprus	Kazakhstan	Seychelles	Zimbabwe
Dominican Republic	Kenya	Singapore	
Ecuador	Kuwait	Slovakia	
Egypt	Lebanon	South Africa	
France	Luxembourg	South Korea	

Responses from

84+  
countries



## Questions or Comments

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