

Association of Energy Engineers

2023 Energy Jobs & Market Trends Survey

Summary of Findings

August 2023

Pioneering Energy Solutions Since 1977

Empowering over 17,000 members and 32,000 certified professionals across more than 100 countries, the Association of Energy Engineers (AEE) continues to be the cornerstone for driving sustainable change within the global energy sector.

As a non-profit organization, AEE serves not just its members but also a wider community of industry experts who strive to reshape energy systems and reduce environmental impact. Our mission extends beyond improving energy efficiency; we focus on fostering innovative technologies, facilitating industry collaborations, and setting the benchmark for environmental responsibility. In our relentless pursuit for excellence, we help industry professionals make buildings more efficient, reduce greenhouse gas emissions, and contribute toward global net-zero objectives.

At the heart of our impact is our extensive network, built on the foundation of trust and expertise that we have nurtured over the years. Our wide range of conferences, expos, and educational programs offer a unique platform for knowledge sharing and professional growth. Through these initiatives, we help practitioners adapt to ever-evolving market dynamics and technologies, thus ensuring they are well-equipped to meet the challenges and opportunities that lie ahead.

With this annual Energy Jobs & Market Trends report, we aim to provide a comprehensive snapshot of the energy sector's current state, projecting future trends and identifying key growth areas. By arming professionals with data and insights, we facilitate smarter decision-making, encourage innovation, and help align industry practices with global sustainability goals.

Thank you for being a part of this transformational journey. Together, we are creating a more sustainable, efficient, and promising future for the global energy industry.



Our Vision

Leading the global energy community to meet the challenges of a clean and sustainable future

Our Mission

To shape the future of the energy industry through networking, energy awareness, education, training, professional certification and recognition



Our Values

We Value People First

Making a positive impact in peoples' lives while delivering high-quality and responsive service.

We are a Global Family

Treating all with mutual respect, honor, dignity, and loyalty as we work together towards a common goal.

We are Guided by the Highest Standards

Upholding the highest levels of professionalism, integrity, impartiality, honesty, ethical conduct, and attitude in all relations.

We Celebrate Diversity and Inclusion

Modeling and promoting the benefits of a diverse and inclusive environment with equity for all.

We are Innovative

Continuously striving for professional and personal growth and looking for creative solutions to evolve and adapt to be at the forefront of the industry and our operations.



Objectives & Methodology

This survey:

- Fielded from July 10 – August 5, 2023
- Took approximately 7 minutes to complete
- Received 1281 responses; 1075 completed surveys
- Has a margin of error of +/-3% at the 95% confidence level
- Global representation among completed surveys:

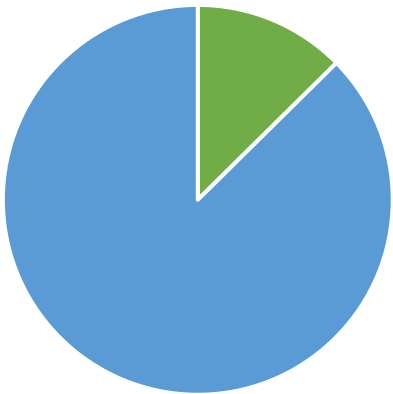
Region	n =
North America	659
Middle East & North Africa	108
Sub-Saharan Africa	105
Europe & Central Asia	68
Latin America & Caribbean	49
South Asia	44
East Asia & Pacific	42



Demographics: Gender & Age

This survey was taken by a wide representation of ages. Reflecting both membership and the industry, survey participants were more likely to be male.

Age	
24 or younger	1.6%
25 – 29	5.6%
30 – 39	23.2%
40 – 49	22.4%
50 – 59	21.3%
60 – 69	18.9%
70+	6.2%
Prefer not to answer	0.8%



Gender

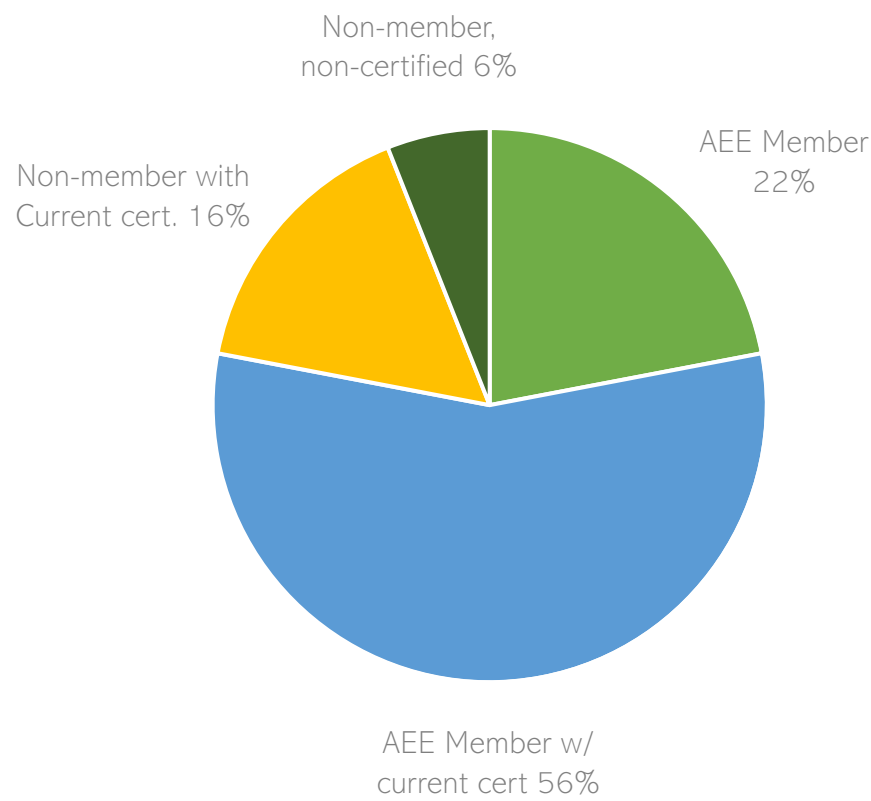
Male 87%

Female 13%



Who Responds to Our Survey

What is your current relationship with AEE?
What is your role in your company/organization?



Roles	Member	Member with an AEE Certification	Non-Member with an AEE Certification	% per role	
Engineer	7.0%	18.3%	6.3%	31.6%	84.2%
Manager	6.9%	14.9%	4.6%	26.4%	
Owner	3.3%	6.5%	1.6%	11.4%	
Projects / Integration	1.7%	5.1%	.9%	7.7%	
Executive	2.2%	4.1%	0.8%	7.1%	
Sales / Marketing	.9%	1.9%	.6%	3.4%	
Maintenance / Support	.3%	1.6%	.7%	2.6%	
Instructor / Professor	.8%	.3%	.2%	1.3%	
Retired	.4%	.5%	.4%	1.3%	
% per group	23.5%	53.1%	16.1%		

Non-AEE, Non-Certified 6.7% of total

Organizations & Responsibilities

How would you classify your company / organization?

What is your primary responsibility in your company/organization?

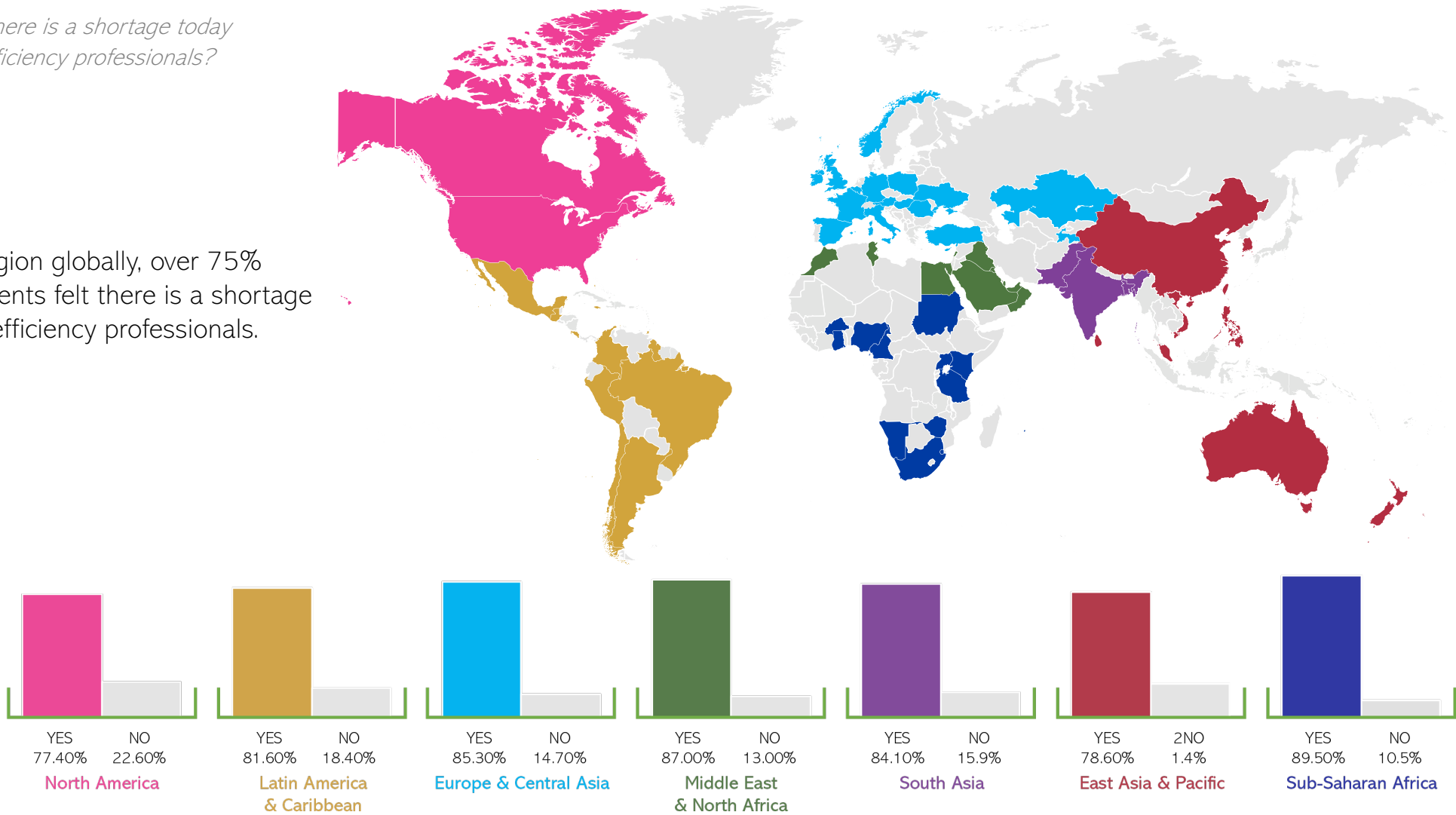
Organizations	Member	Member with an AEE Certification	Non-Member with an AEE Certification	% per Org
Consultant	7.7%	17.5%	4.0%	29.2%
Energy Service Company (ESCO)	3.1%	6.8%	2.5%	12.4%
Government	2.4%	6.2%	2.3%	10.9%
Utility	1.1%	5.7%	1.4%	8.2%
Manufacturer	1.8%	4.0%	1.3%	7.1%
Institutional	1.0%	3.8%	0.9%	5.7%
Contractor	1.8%	3.2%	1.0%	6.0%
Industrial	1.5%	3.0%	1.3%	5.8%
Technology / Product / Systems / Solutions	1.7%	2.6%	0.7%	5.0%
Commercial	0.7%	1.6%	0.7%	3.0%
	22.8%	54.4%	16.1%	

Responsibilities	Member	Member with an AEE Certification	Non-Member with an AEE Certification	% per Role
Energy Efficiency	13.8%	35.0%	11.7%	60.5%
Facility(s) Mgmt.	3.2%	7.2%	2.2%	12.6%
Sustainability Mgmt.	1.7%	5.5%	0.5%	7.7%
Account Mgmt.	0.9%	2.6%	0.6%	4.1%
Building(s) Mgmt.	1.2%	2.4%	1.0%	4.6%
Energy Procurement	0.4%	1.6%	0.7%	2.7%
ESG (Environmental Social Governance) Responsibility	0.4%	0.60%	0.1%	1.1%
Carbon Reporting Responsibility	0.2%	0.4%	0.1%	0.7%
	24.2%	59.5%	18.3%	

Workforce Perceptions

Do believe there is a shortage today of energy efficiency professionals?

In every region globally, over 75% of respondents felt there is a shortage of energy efficiency professionals.



Workforce Perceptions

When do you plan to retire?

Nearly 40% indicate they will be retiring within the next 5 – 10 years, highlighting both the opportunity and need for new professionals to enter the industry.

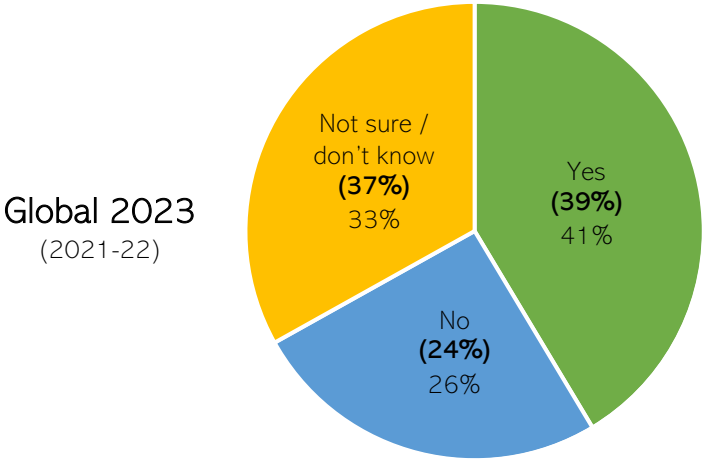
Plan to Retire? (Q9)	North America	Latin America & Caribbean	Europe & Central Asia	Middle East & North Africa	Sub-Saharan Africa	South Asia	East Asia & Pacific	Total
Within next 5 years	27.3%	6.1%	16.2%	5.6%	7.6%	11.4%	21.4%	20.7%
Within next 10 years	21.9%	12.2%	13.2%	7.4%	11.4%	15.9%	19.1%	18.0%
10+ years	49.2%	81.6%	70.6%	87.0%	81.0%	70.5%	54.8%	60.5%
Retired / Not applicable	0.9%	0.0%	0.0%	0.0%	0.0%	2.3%	4.8%	0.8%

Opportunities In Workforce (by Region)

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

Plan to Hire?	North America	Latin America & Caribbean	Europe & Central Asia	Middle East & North Africa	Sub-Saharan Africa	South Asia	East Asia & Pacific
Yes	43.3%	34.7%	42.7%	38.0%	34.2%	36.4%	50.0%
No	26.4%	30.6%	16.2%	20.4%	24.8%	34.1%	26.2%
Not sure / don't know	30.3%	34.7%	41.1%	41.6%	41.0%	29.5%	23.8%

Job opportunities for energy professionals have held steady from 2021-22 levels, despite global economic challenges.



Opportunities In Workforce (by Sector)

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

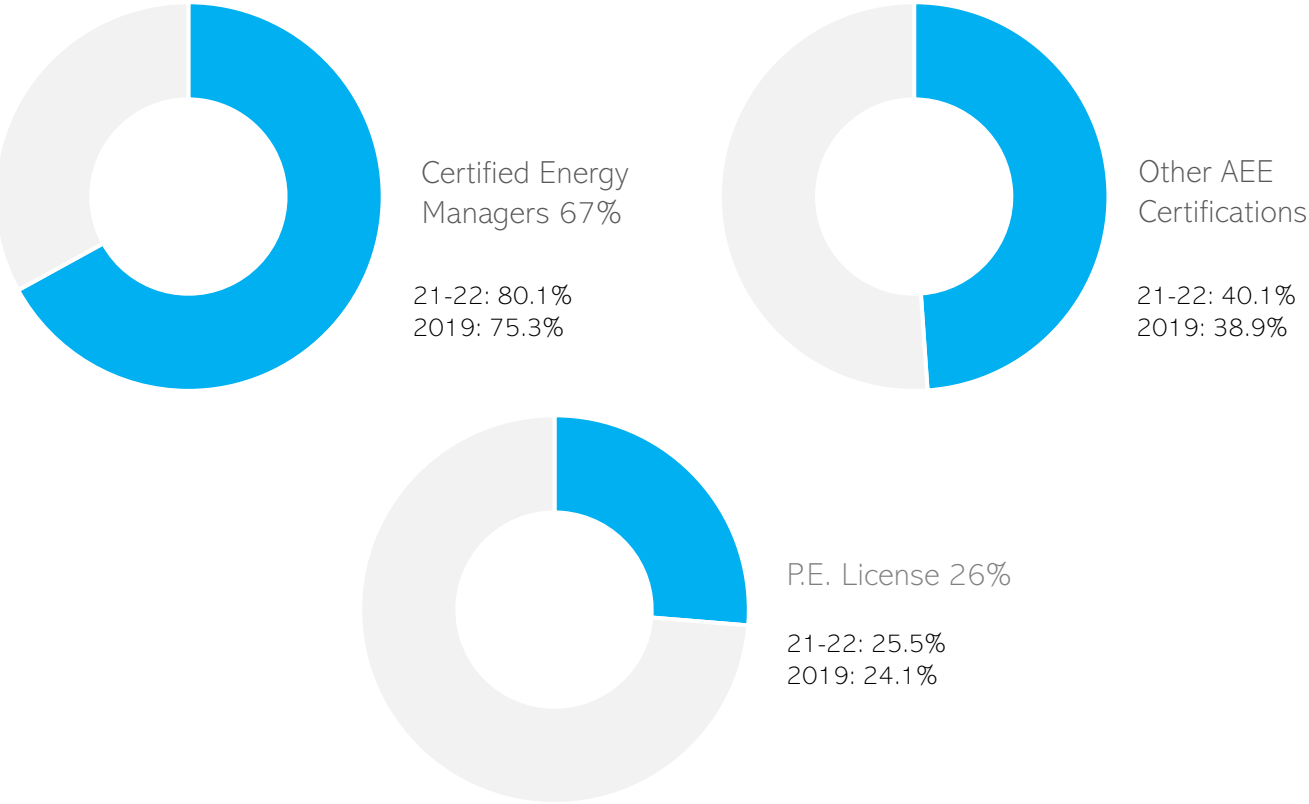
Industries that indicate strong hiring in the next year include ESCOs, Utilities, Consultancy and Contractors, and Commercial sectors.

Plan to Hire?	Yes	Unsure / Don't Know	No
ESCO	62%	28%	10%
Utility	54%	30%	16%
Consultant	46%	29%	25%
Contractor	40%	29%	31%
Commercial	40%	29%	31%
Government	38%	37%	25%
Tech / Product / Systems / Solutions	37%	37%	27%
Manufacturer	37%	37%	26%
Industrial	26%	40%	34%
Institutional	25%	42%	33%

Industry Certifications

Select any of the following credentials you hold. (Select all that apply)

In 2023 we continue to see a large portion of AEE Members and professionals keep certification and licensure.

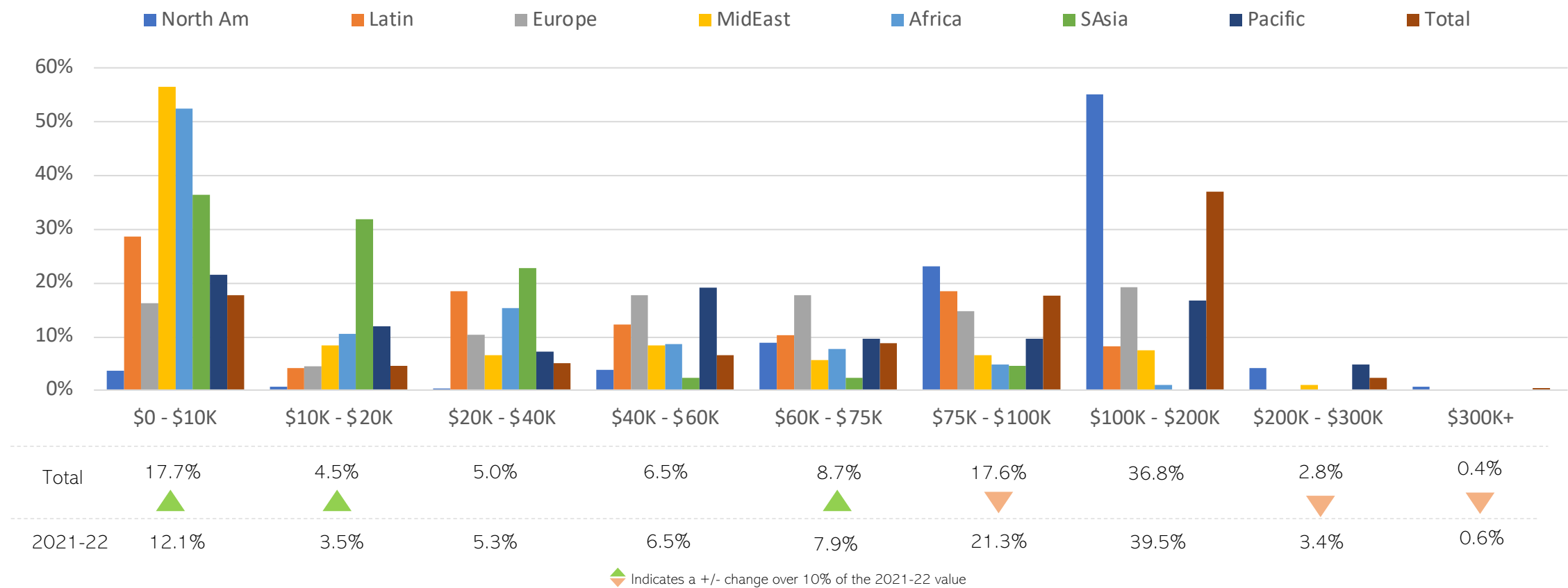


Industry Certification	Total
AEE Certified Energy Manager (CEM)	67.1%
Professional or Licensed Engineer	26.4%
Other AEE Certification(s)	17.0%
AEE Certified Measurements and Verification Professional (CMVP)	14.4%
AEE Certified Energy Auditor (CEA)	12.7%
AEE Certified Building Commissioning Professional (CBCP)	4.8%
Architect	0.5%
Other / None	11.6%

Income

Please input your base salary (in \$USD) as of January 1, 2023.

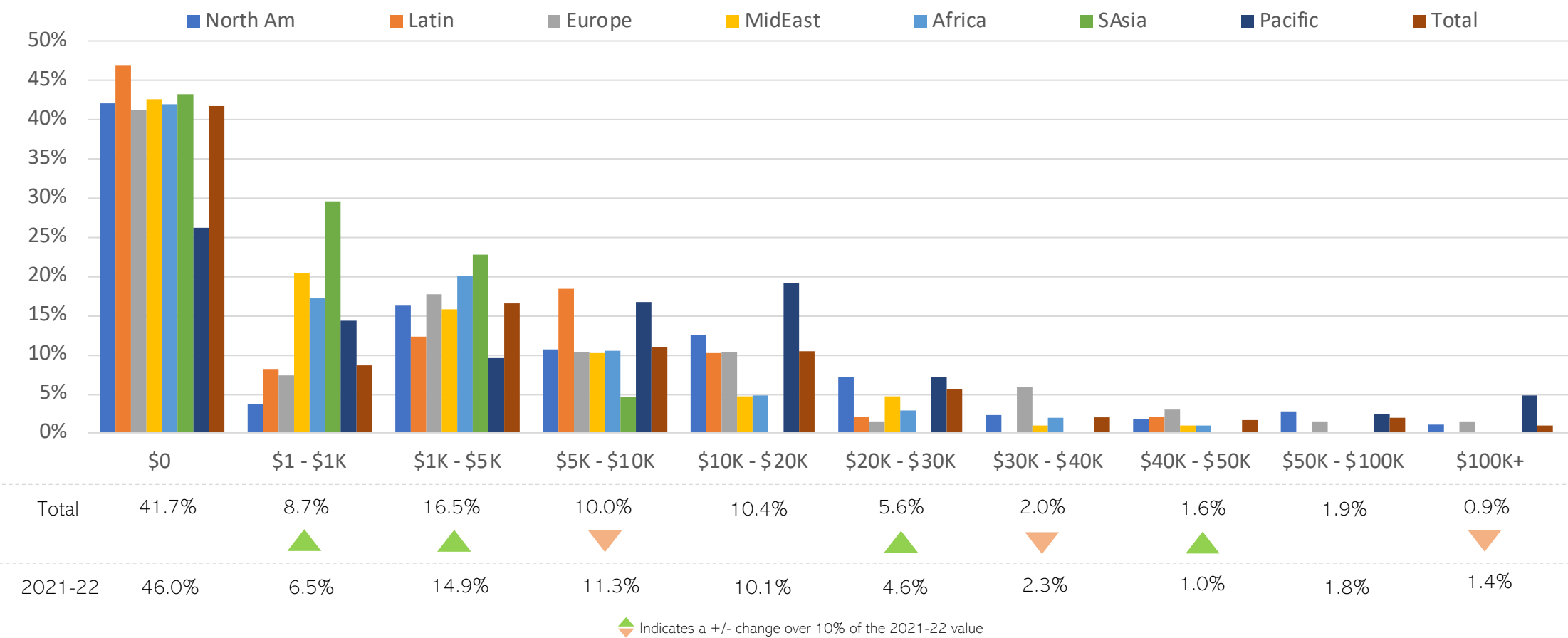
Responses show differences in compensation by region.



Bonus

Please indicate any bonus (in \$USD) you received in 2022.

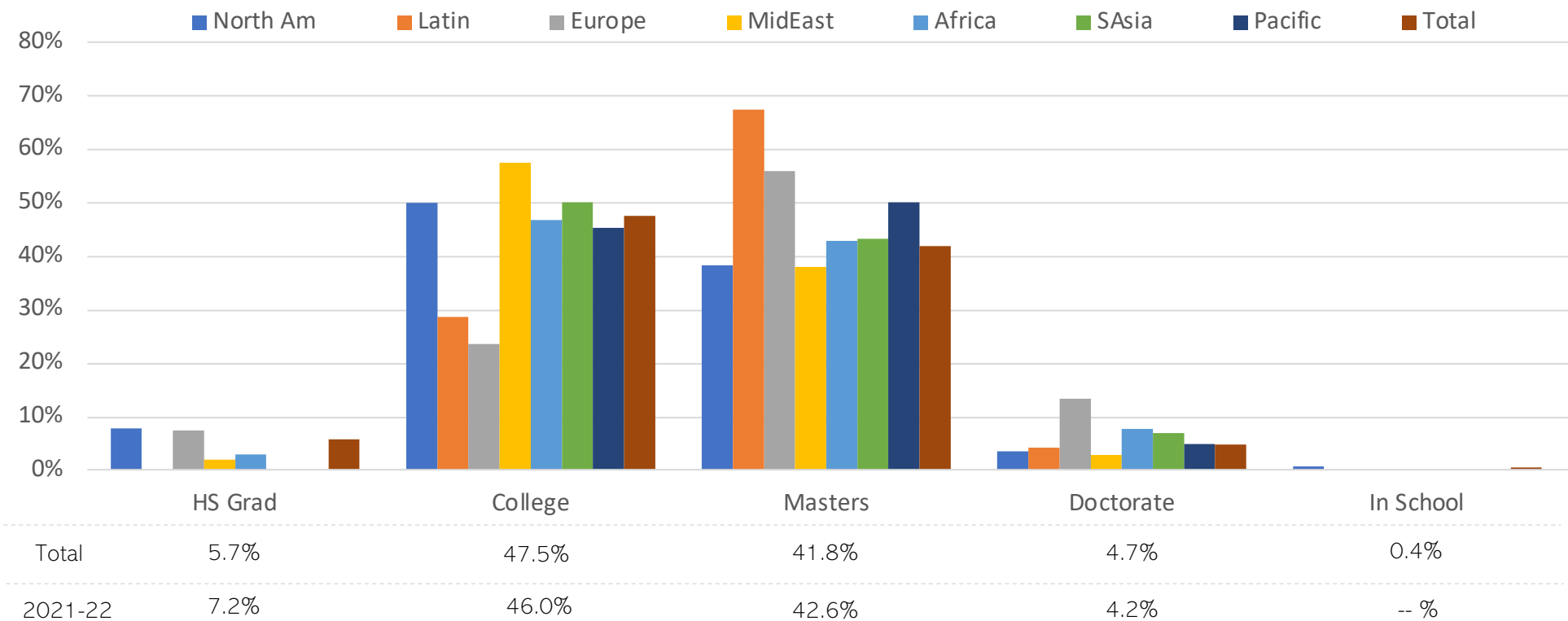
More respondents received bonuses than the previous year, with 58% indicating a bonus of some amount.



Education

What is your highest level of education achieved?

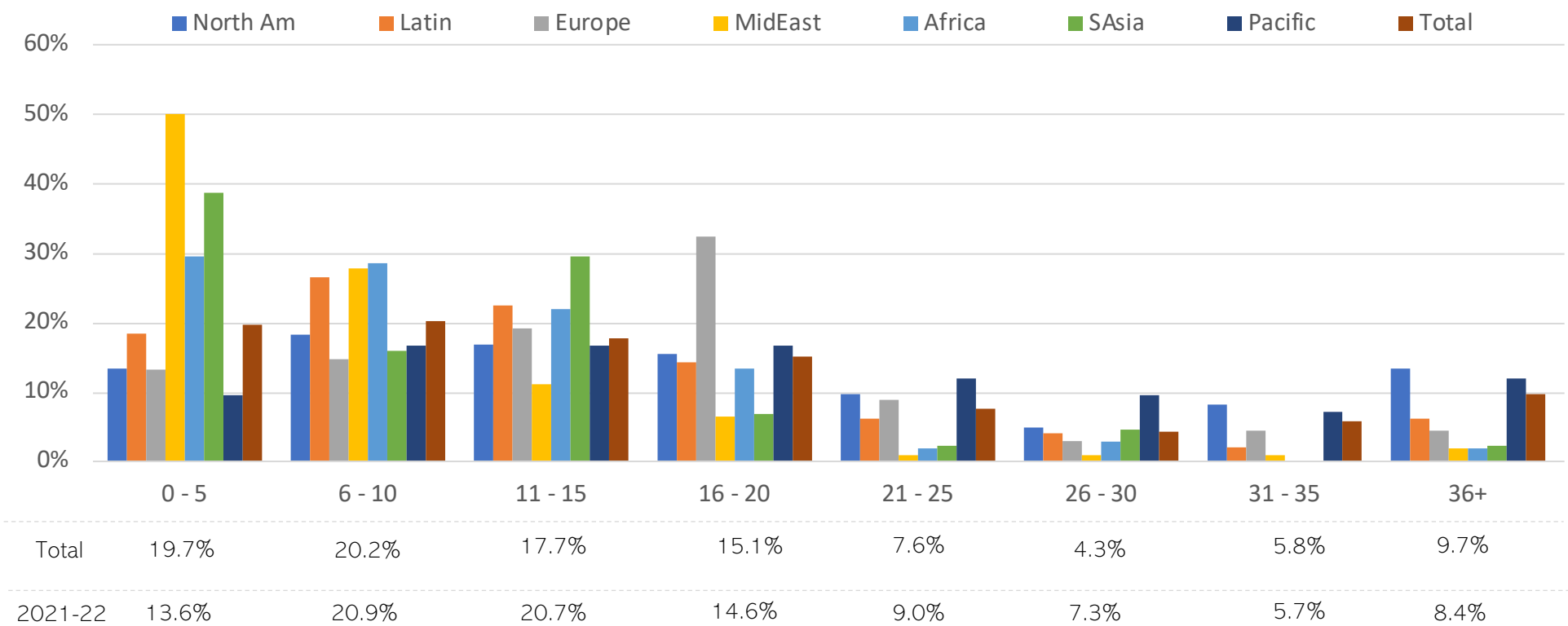
Nearly all (94%) have university-level or higher education.



Experience

How many years of energy efficiency experience do you have?

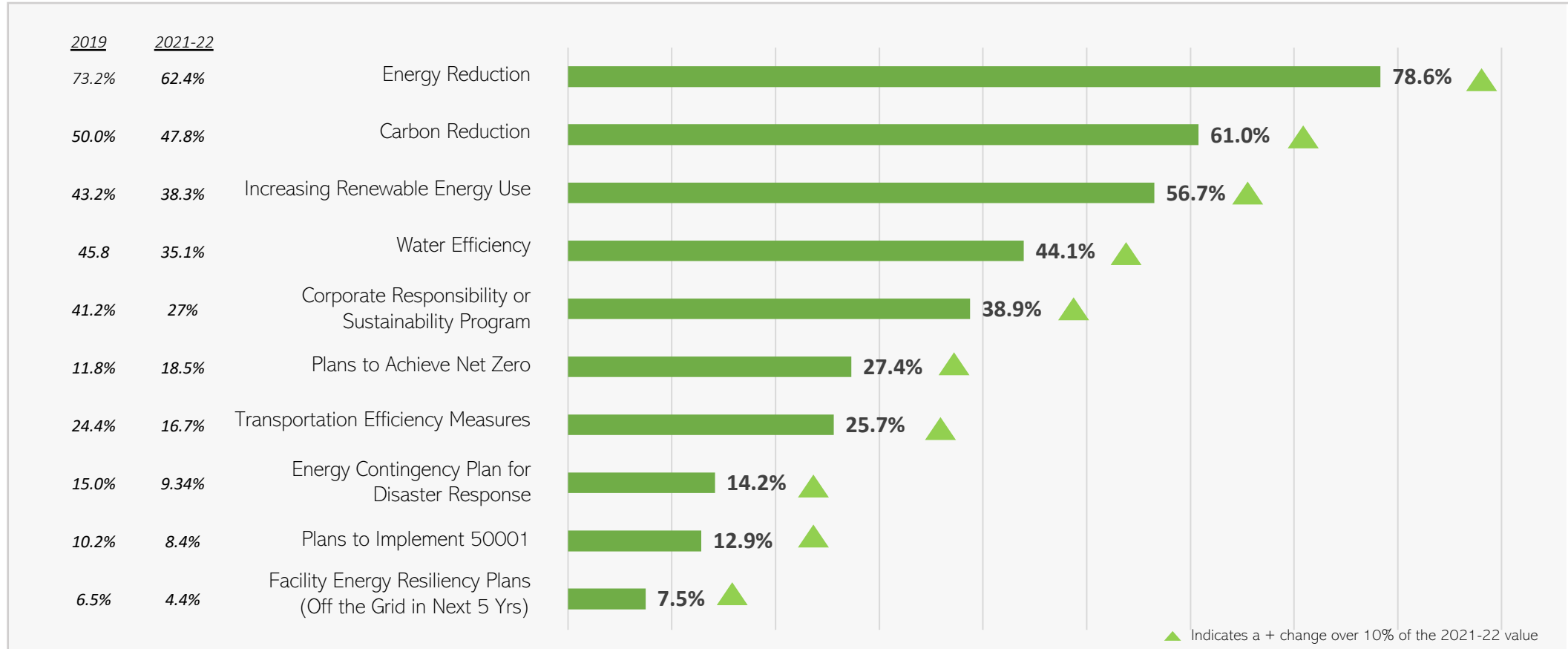
The responses in this survey represent a range of time in the industry, creating a balanced representation of opinions from industry professionals.



Trends in High Level Strategic Goals

Are any of the following measures being considered by your company next year? (Select all that apply.)

Consideration for all categories trended up this year, perhaps indicating an overall increase in investment for energy-related goals.

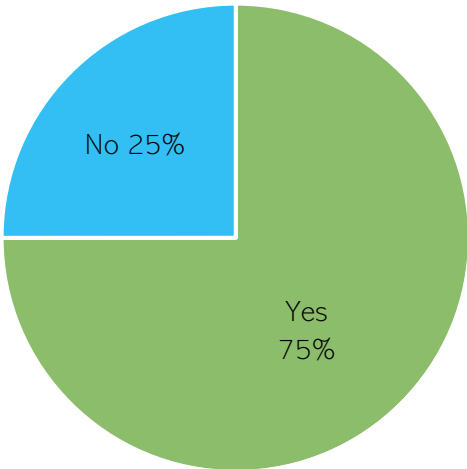


Decarbonization Agreement Statements

With the push for decarbonization, please share your opinion on each statement below.

75% of respondents in the study are energy efficiency decision makers. Agreement is up in 2023 for all three statements about current decarbonization efforts.

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



2023	My company and work are being driven by my decarbonization and net-zero goals.	I am dealing with grid capacity issues.	EV charging is part of my grid and decarbonization initiatives.
Agree	64.3% ▲	40.2% ▲	48.3% ▲
Disagree	15.8%	25.9%	19.5%
N.A	19.9%	33.9%	32.2%

2021-22			
Agree	57.9%	33.2%	43.4%
Disagree	18.9%	30.5%	21.5%
N.A	23.2%	36.3%	35.1%

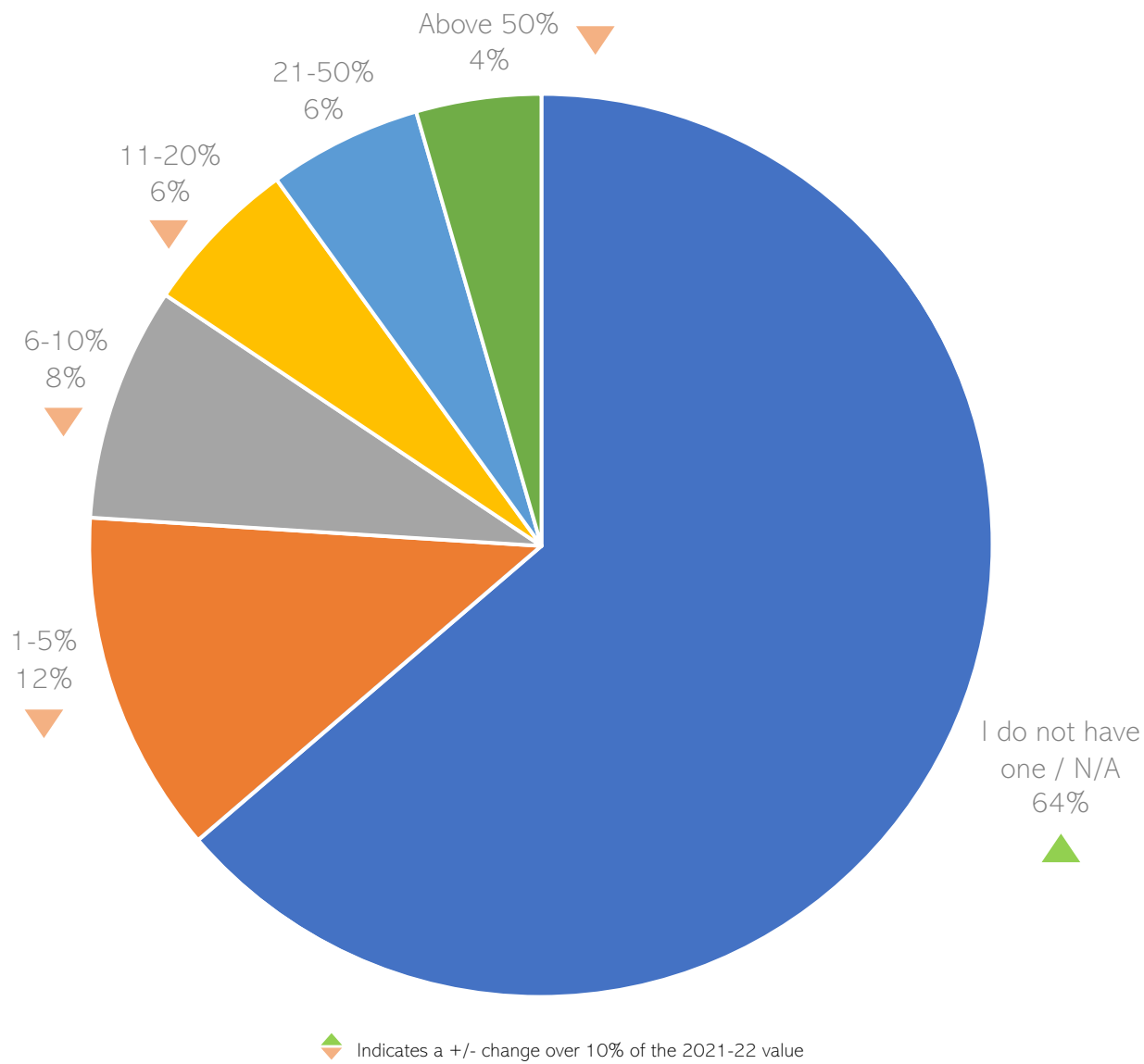
▲ Indicates a +/- change over 10% of the 2021-22 value

2023 Energy Targets

Do you have a renewable energy target to meet in 2023?

Fewer reported having renewable energy targets than in 2021-22.

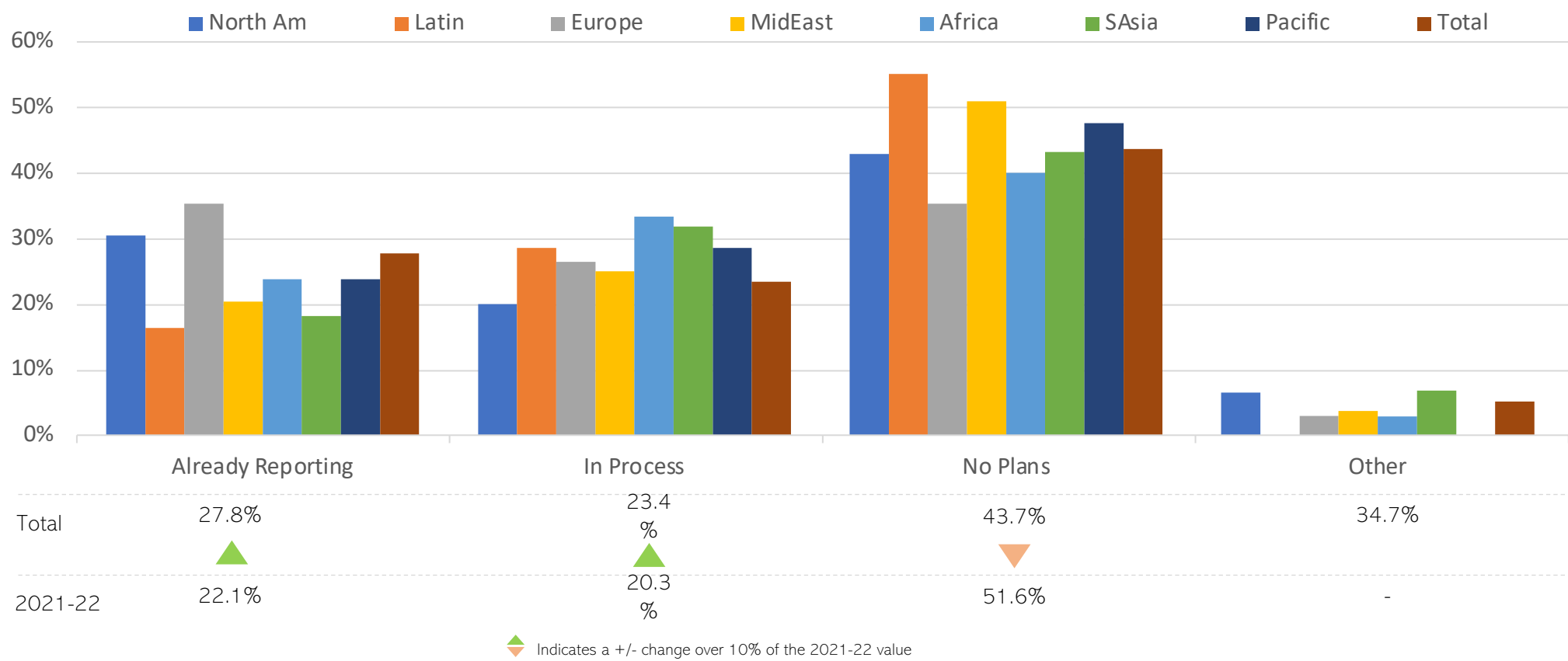
Targets	2021-22	2019
1 – 5%	14%	16%
6 – 10%	14.4%	11.7%
11 – 20%	8.8%	7.3%
21 – 50%	6.5%	6%
Above 50%	5.5%	4%
Don't have one / N/A	50.7%	55%



ESG Reporting

Does your company have a plan for ESG reporting?

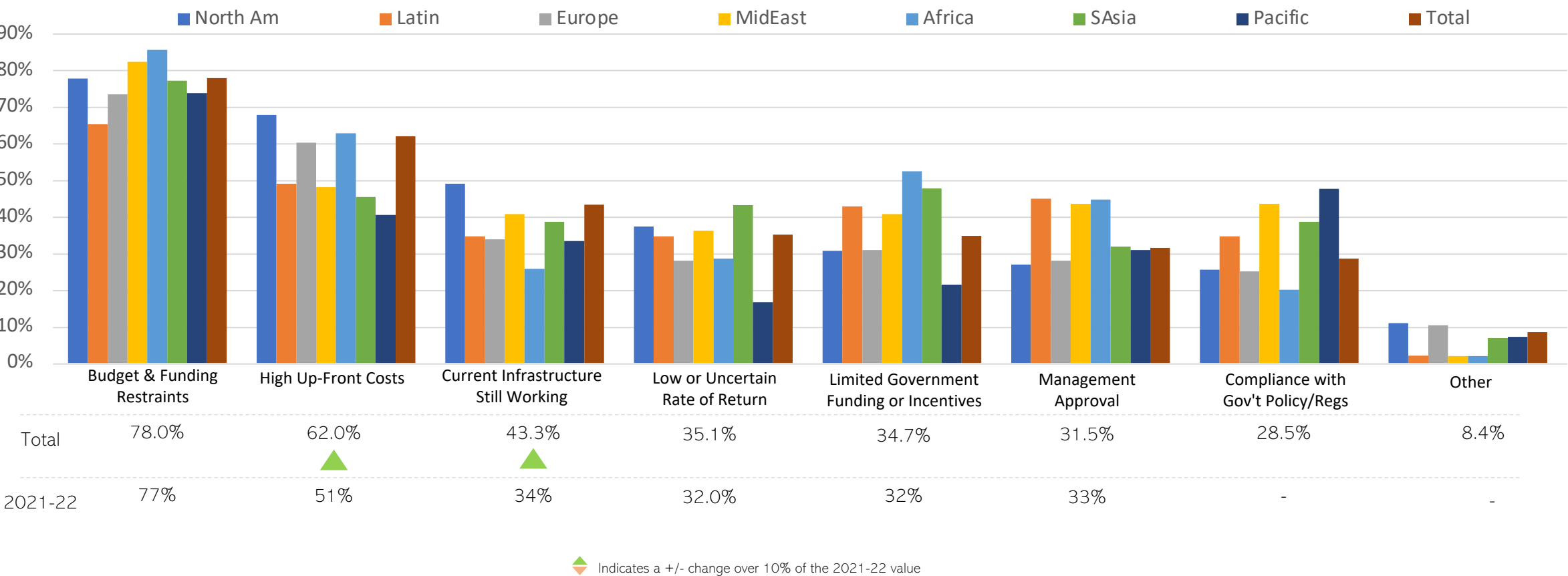
Environmental, Social, and Governance (ESG) policies appear to be trending toward greater acceptance, with an increase in those reporting or planning to report and a decrease in those who say they have no plans at all.



Challenges

What are the most significant challenges to increasing energy efficiency and sustainability? (Select all that apply.)

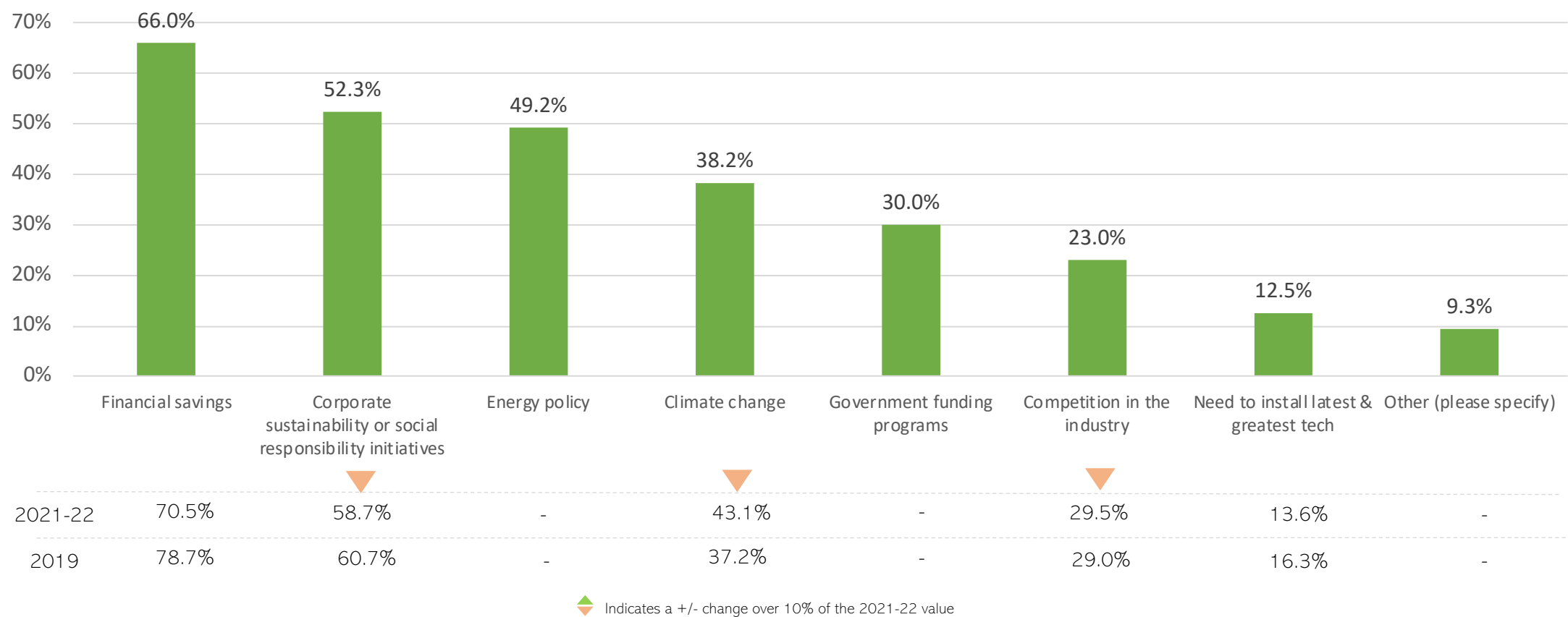
Budget and funding restraints remain the greatest challenge faced in the industry. North America, Europe, and Sub-Saharan Africa were especially challenged by high up-front costs. The challenge of current infrastructure still working also trended up this year.



Factors Driving Change

What is driving your company's energy efficiency programs? (Select all that apply)

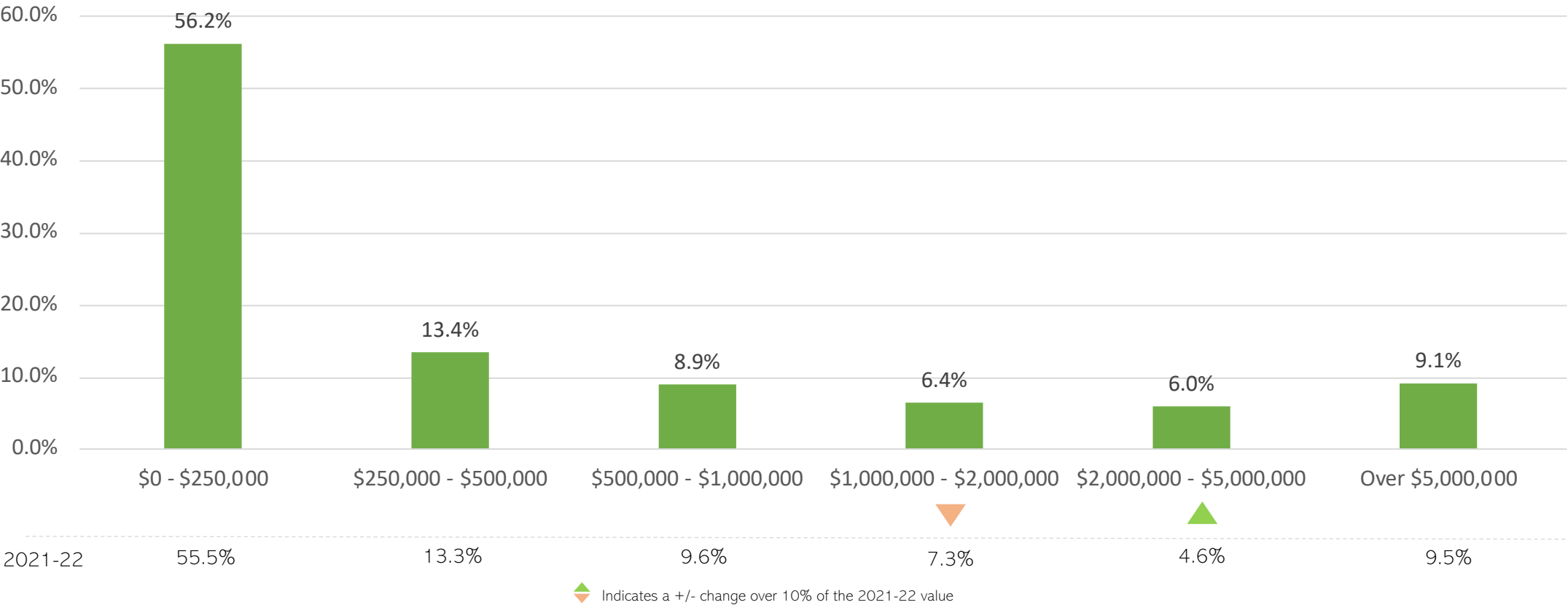
Financial savings remains the leading factor driving change, while corporate sustainability initiatives, climate change, and competition in the industry all trended downward this year.



Efficiency & Sustainability Savings

How much money has your company saved as a result of its energy efficiency or sustainability programs in 2021-2022?

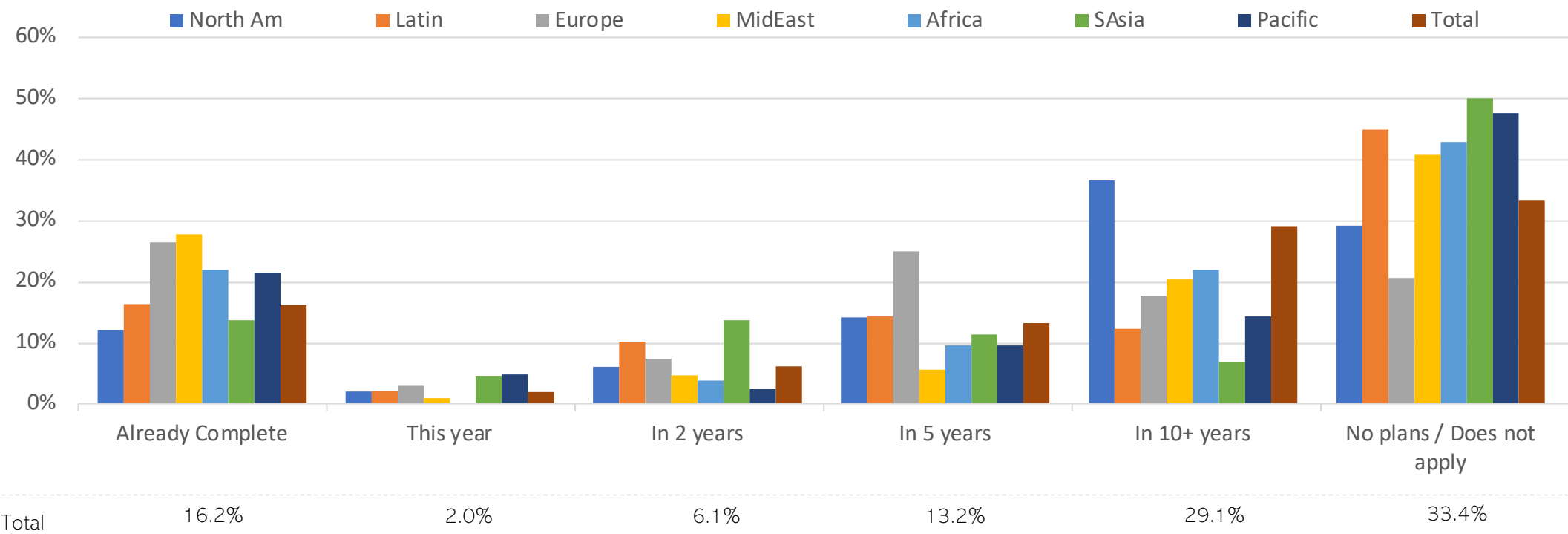
Over 20% reported savings over \$1M as a result of energy efficiency in 2021 – 22.



Planning the Change From Gas to Electric

When do you think your company will change over from gas to electric heating?

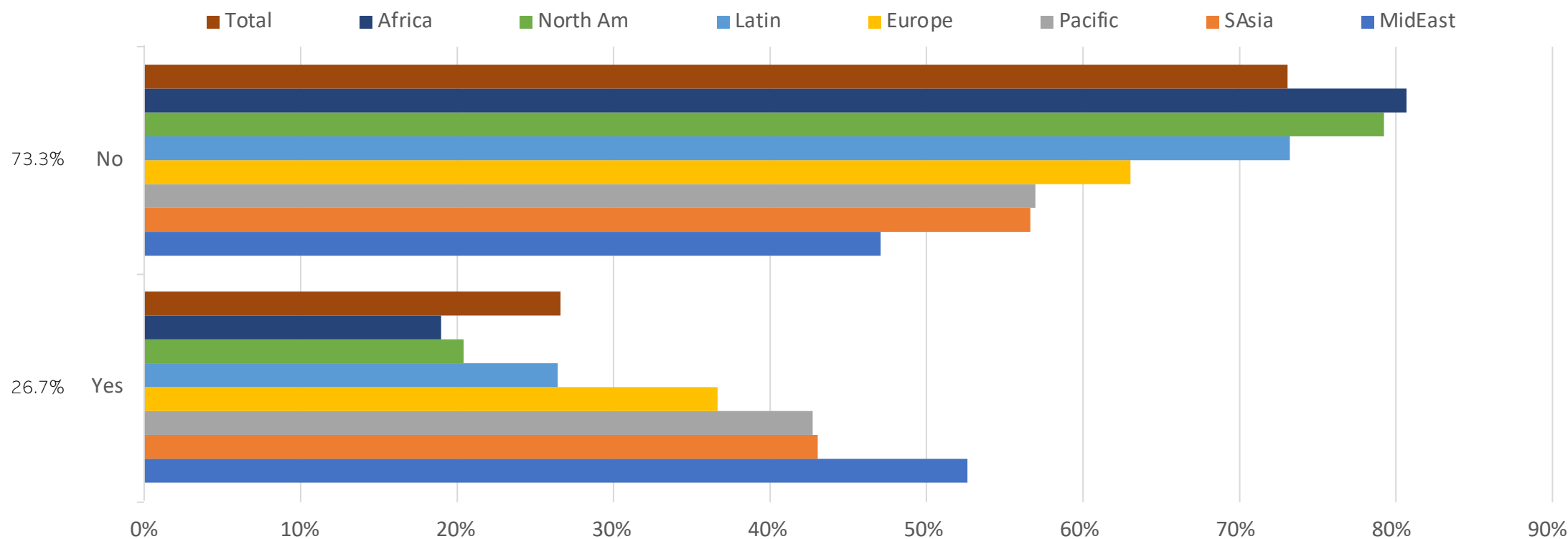
New this year, we asked when respondent's companies might change over from gas to electric heating. 42% of the total indicated their company plans to make the change in 5 – 10 years. 33% indicated no plans (or does not apply.)



Can Your Local Grid Handle the Switch?

Do you think your local electric grid can handle everyone switching from gas to electric heating, as well as from gasoline to electric cars, within the next 10 years?

73% of the total said they did not think their local grid will be ready for a full switch from gas to electric within 10 years.



Appendix | Country Data.

Argentina
Aruba
Australia
Austria
Bahamas
Bahrain
Bangladesh
Belgium
Brazil
Burkina Faso
Cameroon
Canada
Chile
China
Colombia
Costa Rica
Cyprus
Egypt
France

Germany
Ghana
Guam
Guatemala
Guyana
Hong Kong
Hungary
India
Iraq
Ireland
Italy
Jamaica
Jordan
Kazakhstan
Kenya
Kuwait
Lebanon
Malaysia
Maldives

Mauritius
Mexico
Morocco
Namibia
New Caledonia
New Zealand
Nigeria
Norway
Oman
Pakistan
Peru
Phillipines
Poland
Qatar
Romania
Saudi Arabia
Singapore
Slovakia
South Africa

South Korea
Spain
Sri Lanka
Sudan
Swaziland (Eswatini)
Taiwan
Tajikistan
Tanzania
Trinidad & Tobago
Tunisia
Turkey
UAE
Uganda
UK
Ukraine
USA
Vietnam
Zimbabwe

Responses from
75
countries

