



AEG Net Zero BUILDINGS SUMMIT

THE WILLDAN CLEAN ENERGY ACADEMY:
ADDRESSING CRITICAL OBSTACLES TO
WORKFORCE DEVELOPMENT

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cleanenergyacademy.org

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THE CHALLENGE: PRESSURES WITHIN, PRESSURES WITHOUT



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DRIVERS

1) DEI targets in CRE are Broadening and Deepening

The Global Real Estate DEI 2022 Survey results²:

- 56.1% : formal DEI program
- 95% : addressing DEI issues
- 85% : set qualitative or quantitative goals
- 11.1% : plan in next 12 months
- 29% : dedicated DEI budget

2) Decarbonization Regulatory Policies and Fines⁴

- Local Law 97 fines starting in 2024
- 2,700 buildings at risk of fine

3) DEI Regulatory & Investment Pressures

- Regulatory bodies calling ESG reporting on DEI
- Human capital disclosure rules changing in 2023
- Stakeholders and employees want to see solutions

THE SOLUTION: THE CLEAN ENERGY ACADEMY



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A TURN-KEY SOLUTION

Training

- Green Economy: Sustainability Local Laws, Programs and Incentives
- Curriculum: Lighting, HVAC, Building Envelope, Heating & DHW, Clean Heat
- Capstone Service-Learning Projects: Job Readiness
- Professional Development & Career Services : Interview Readiness
- Continuing Education & Certifications

Partnerships

- NYSERDA PON's
- Employers & Market Partners: Con Edison, Willdan
- Promote through our classes and partners
- Community based partnerships: Wrap around services

THE VILLAGE

Our village includes:

- 73 Total # of Companies
- 61 Clean Energy Companies
- 49 Total Employers
- 29 SMB Market Partners
- 20 Recruitment Partners
- 20 Non-Profits Organizations
- 12 MWBE Certified Firms
- 6 Subcontractors
- 5 Willdan companies, so far

Workforce Partners:

- WeACT
- JCC of SI
- WestCOP
- UGC
- DC37

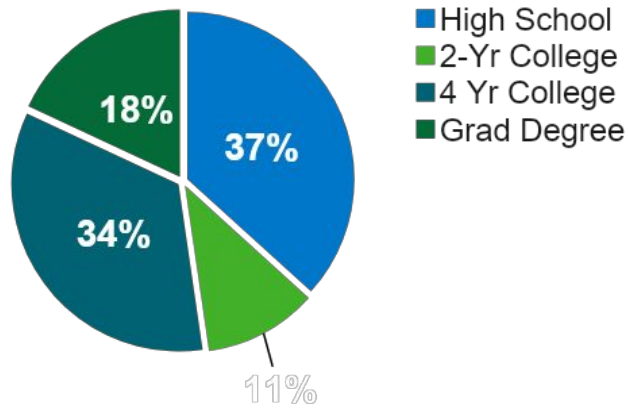


THE CLEAN ENERGY PROGRAM: RESULTS

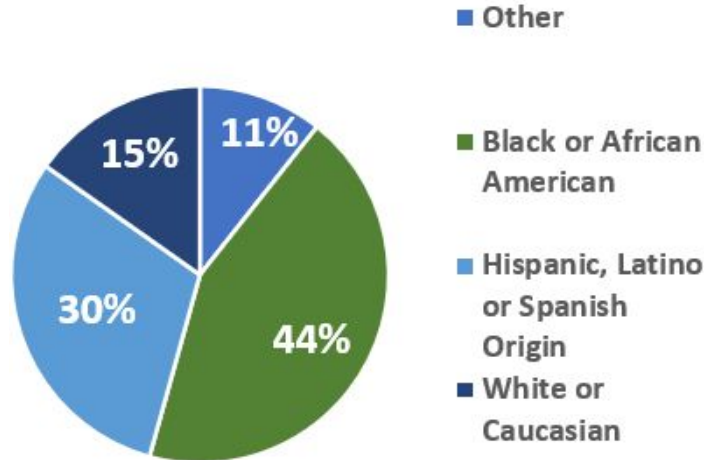


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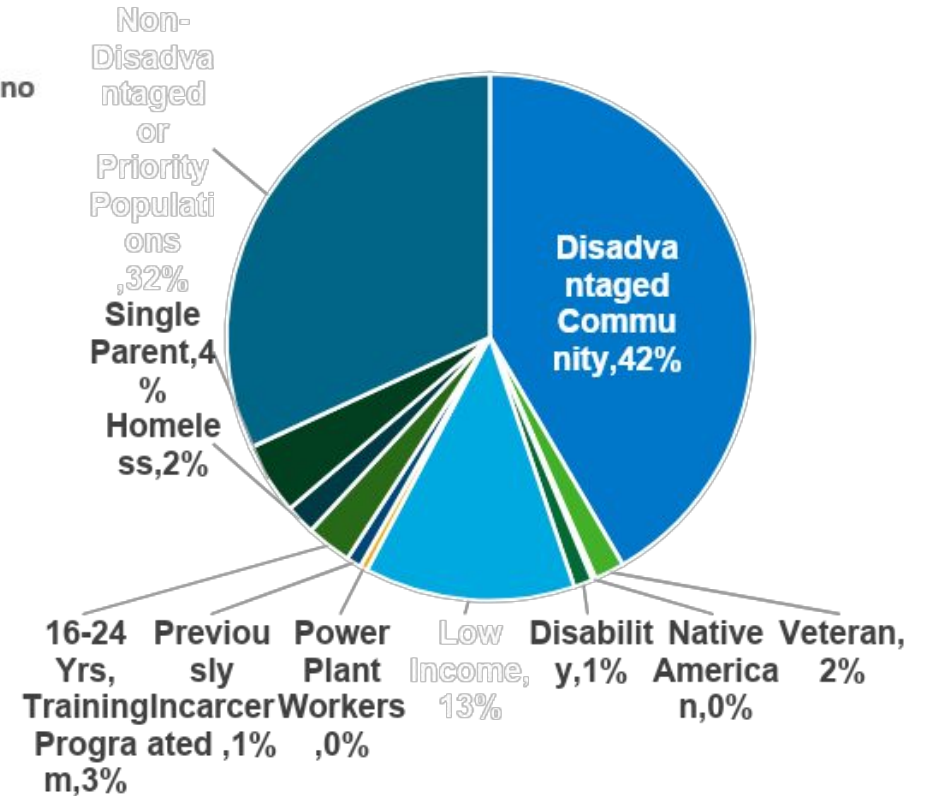
Participants by Education Level



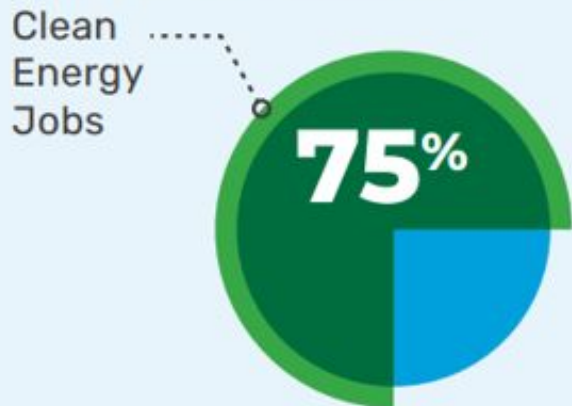
Enrollment by Ethnicity



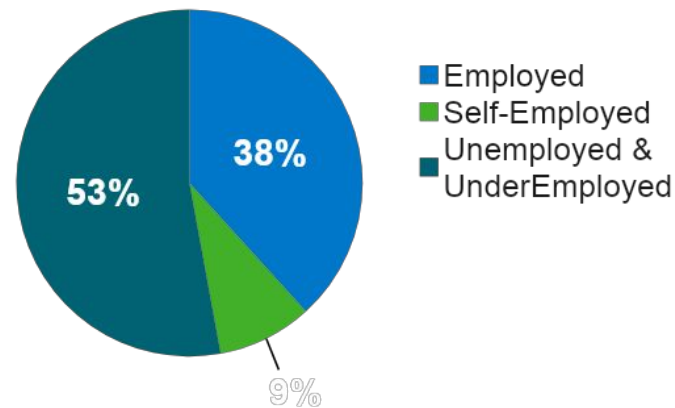
WCEA Participants by Priority Population



Total Graduates



Participant by Employment Status



CALL TO ACTION: FROM ASPIRATIONS TO ACTIONS



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OVERCOMING OBSTACLES

- ❑ Training and development practices
- ❑ Finding the diverse candidate pool
- ❑ Creating awareness of employment opportunities
- ❑ Challenges in workforce development

"Regarding workforce development, a critical obstacle to collectively overcome in 12 months is...

MOVING FROM ASPIRATIONS TO ACTIONS."

ACTIONS

Targets

- ❑ This looks different for everyone
- ❑ Challenge: set measurable goals

Case Studies

- ❑ Willdan
- ❑ Con Edison
- ❑ NYSERDA PON's
- ❑ Promote, Train, & Hire

Partnerships & Case Studies

- ❑ Clean Energy Academy
- ❑ Continuous Education and Professional Development
- ❑ Mentorship



Welcome to the Willdan Clean Energy Academy Network



Thank You!

from the Willdan Clean Energy Academy

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REFERENCES

1. [“Human Capital Disclosures are key components of your ESG reporting strategy.”
https://www.pwc.com/us/en/services/esg/library/diversity-equity-inclusion-reporting.html](https://www.pwc.com/us/en/services/esg/library/diversity-equity-inclusion-reporting.html)
2. “DEI efforts are improving in commercial real estate, but more should be done, BOMA leaders say.” BOMA international.
https://www.boma.org/BOMAKnowledgeCenter/Topics/Diversity-Equity-Inclusion/DEI_Efforts_Improving_in_Commercial_Real_Estate.aspx
3. [Global Real Estate DEI Survey 2022: Executive Summary](#)
4. New York Developers Rush to Reduce Emissions as Hefty Fines Loom.
<https://www.nytimes.com/2022/08/16/business/new-york-real-estate-climate-change.html>

Program Outcomes: Our SMB Eco-System



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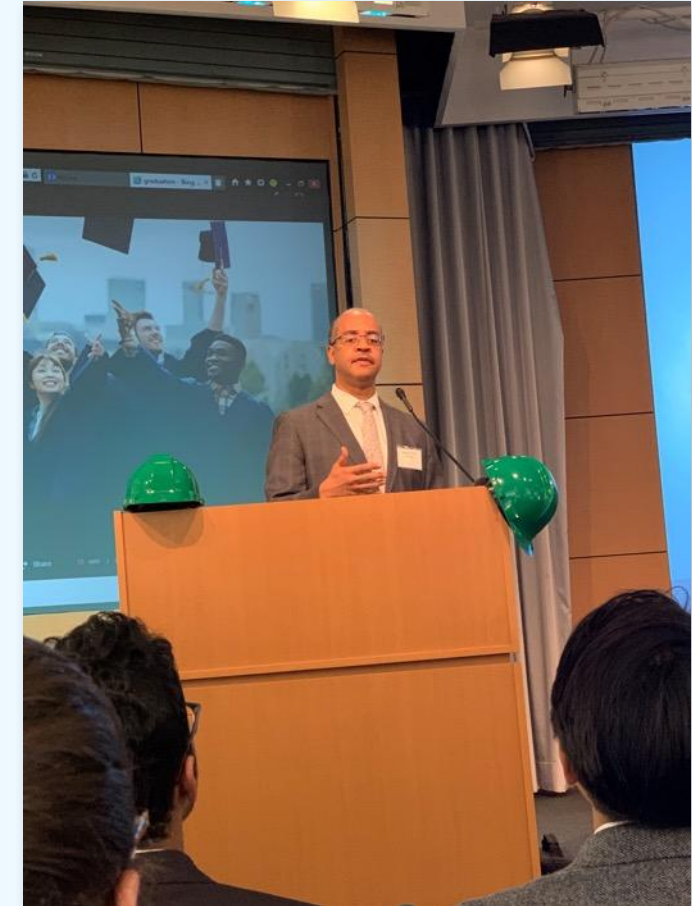
Con Edison EE/DM Eco-System

■ Participants in ConEd Eco-System

- 106 Participants (out of 262 Total)
- 78 Job Placements (4 @ Con Edison)
- 10 Market Partners onboarded
- 9 obtained employment independently
- 9 incumbent workers (3 promotions)

■ Participants hired by Willdan

- 32 Participants hired
 - 20 for SMB Program
 - 11 for MFEEP Program
 - 1 for NYSERDA



Con Edison's SMB Program Overview



Con Edison SMB ("Core") Program

- a. Available to Con Edison Electric and/or Gas customers throughout NYC & Westchester County
- b. ECMs included: Lighting, HVAC, Refrigeration, DHW
- c. Prescriptive & Performance based incentives available



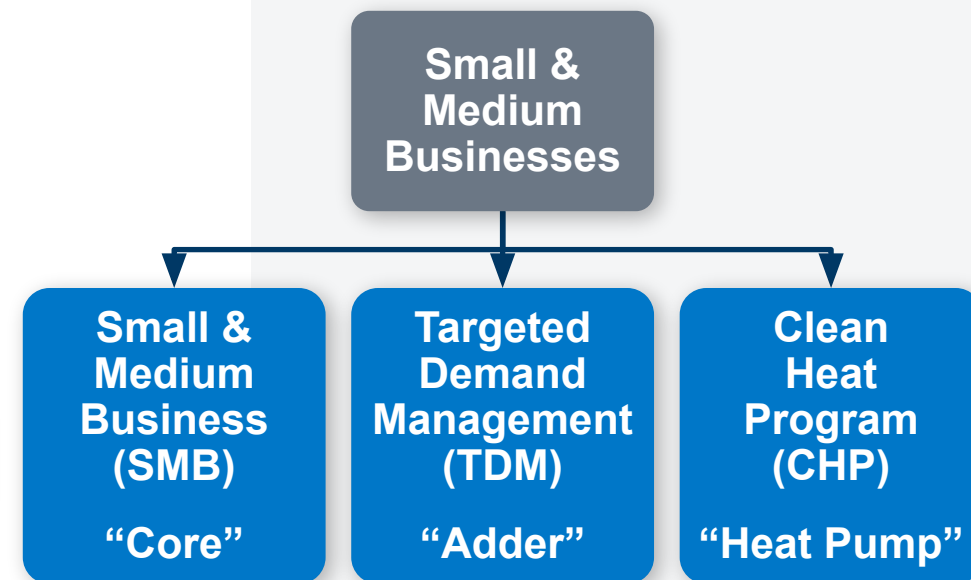
Con Edison TDM ("Adder") Program

- a. Available only to Con Edison electric customers in specific zip codes in Brooklyn & Queens
- b. Lighting and HVAC-R measures that reduce peak demand are eligible for additive ["adder"] incentives



NYS Clean Heat Program (CHP)

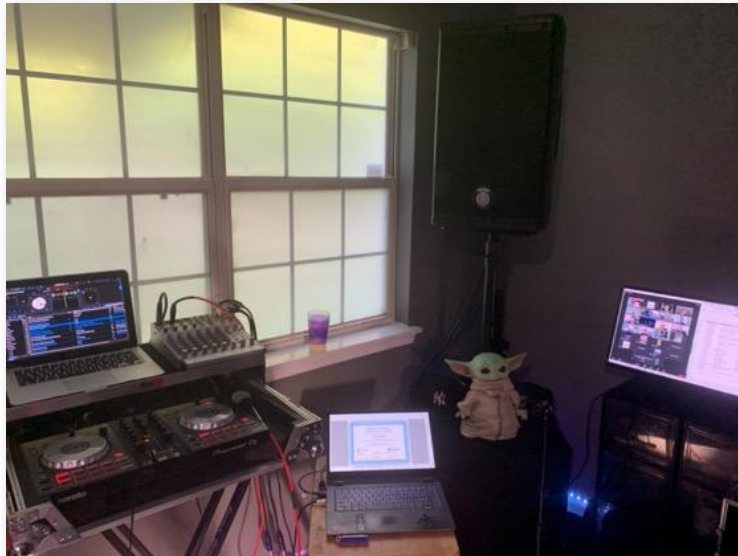
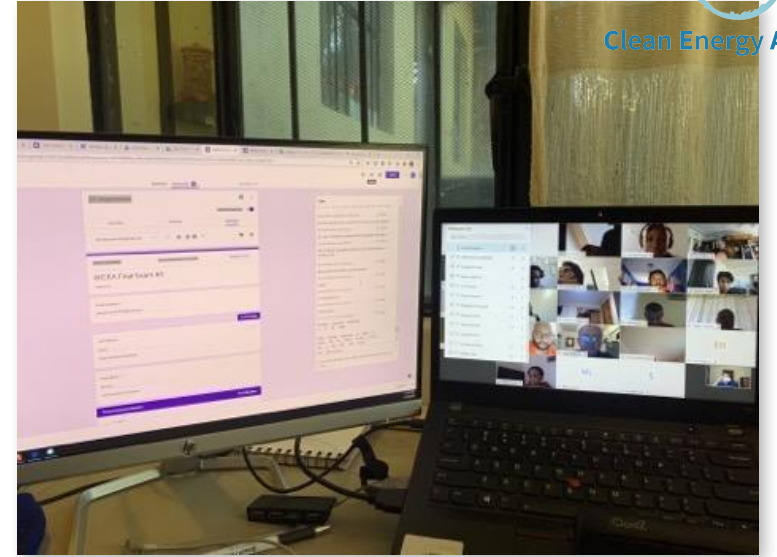
- a. State-wide program, to Electrify Heating & DHW
- b. Developed by NYSERDA, transitioned to Joint Utilities
- c. Available to all ConEdison **Electric** Customers
- d. Air & Ground Source Heat Pumps for **Space and/or Water Heating**



WCEA Program – In Action (Post-COVID)



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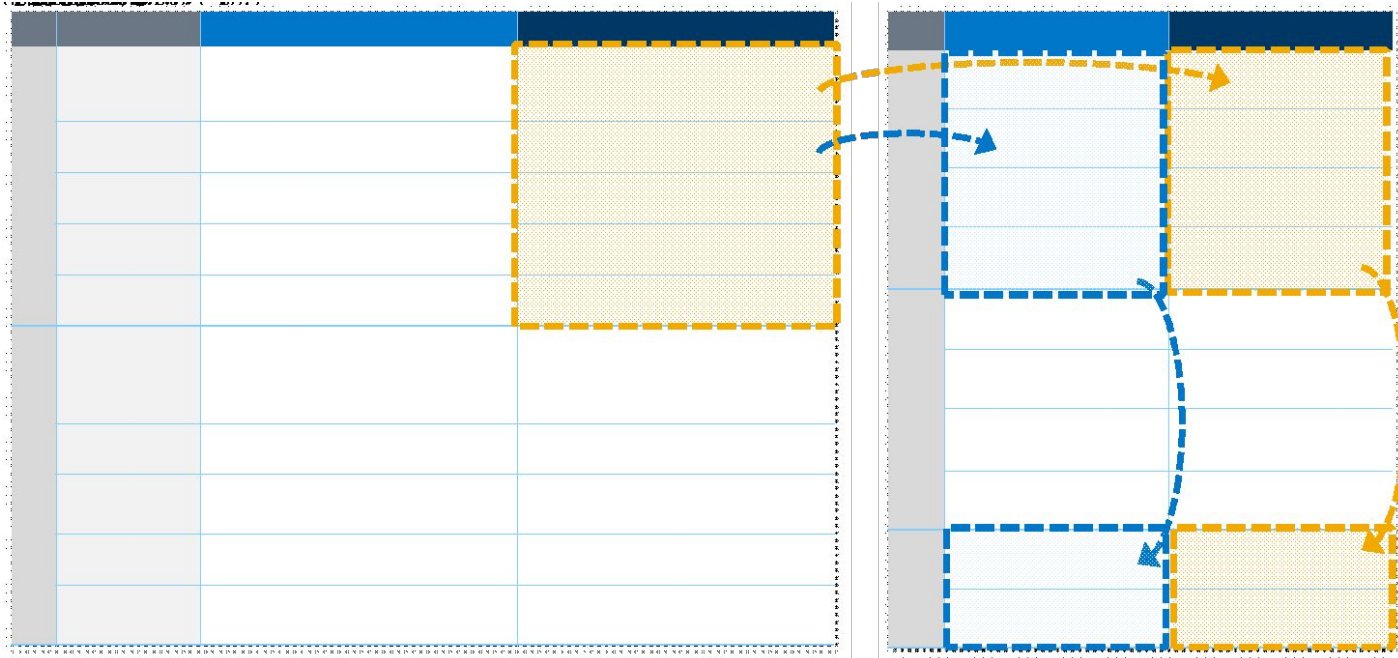
WCEA Program – In Action (Pre-COVID)



Training Services: Courses Design



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Related Certifications

- **EPA 608**

- Type 1 – Small Appliances
- Type 2 – High Pressure Appliances
- Type 3 – Low Pressure Appliances
- Universal



- **AEE**

- Certified Energy Auditor (CEA)
- Certified Energy Manager (CEM)



- **BPI**

- Building Science Fundamentals (BSF)
- Building Analyst (BA)
- Multi Family Building Analyst (MFBA)



- **NALMCO**

- Certified Apprentice Lighting Technician
- Certified Senior Lighting Technician



- **OSHA**

- OSHA 10
- OSHA 30
- Site Safety Training (SST)



Career Services: Capstone Projects



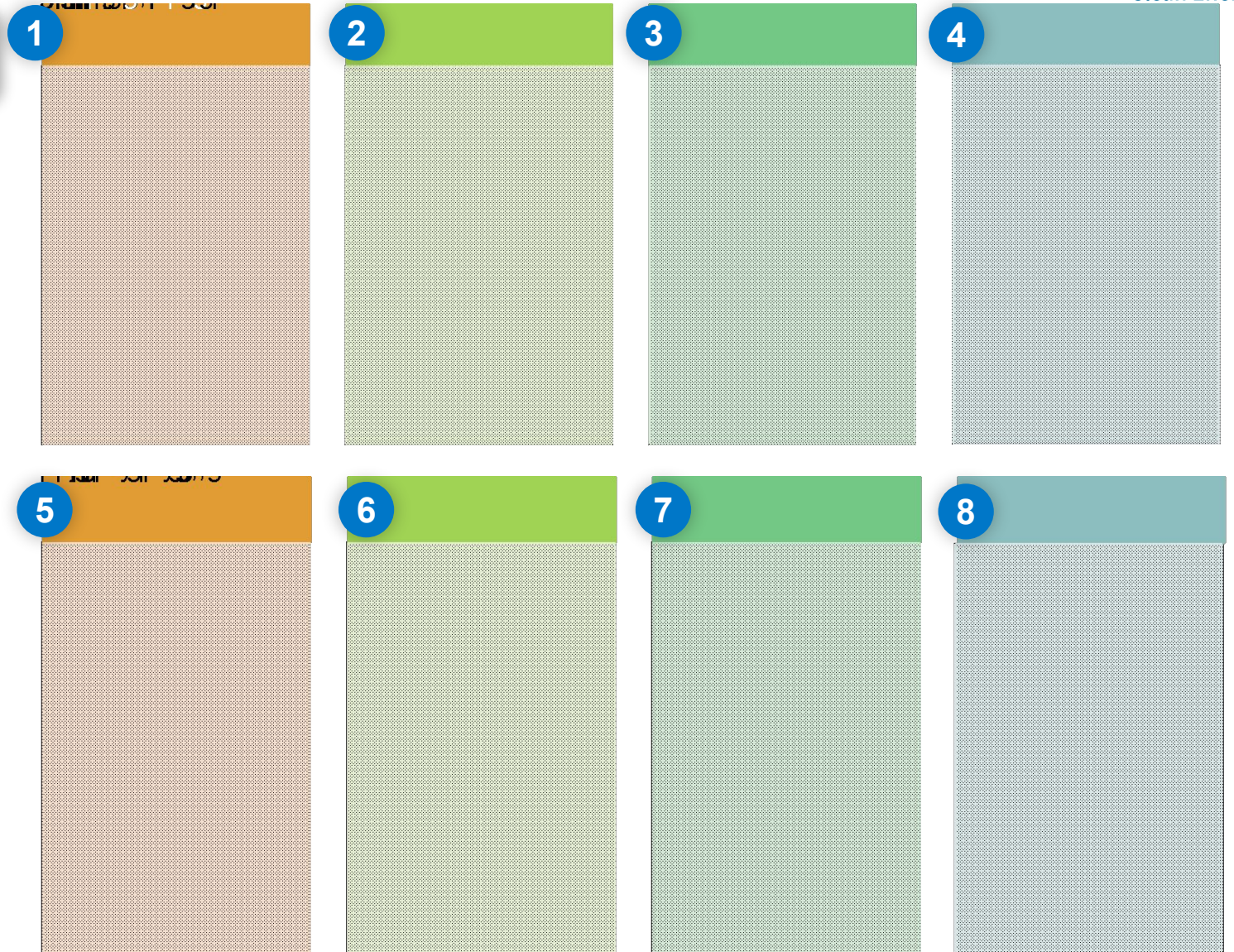
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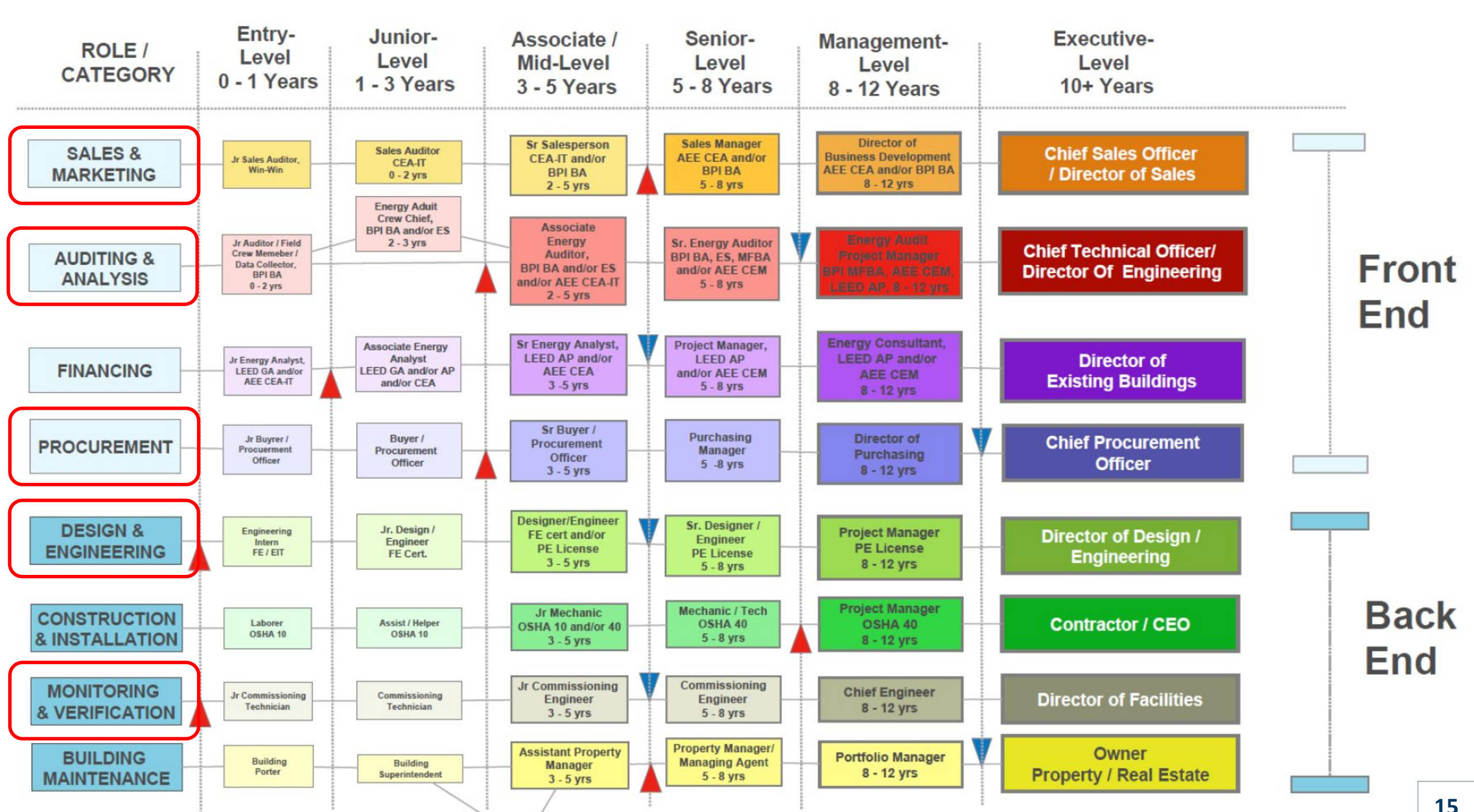
Service Learning Projects

Capstone Project are service-based, volunteer, experiential learning projects, that provide students with a way to gain hands-on experience in real world projects.

Capstone Components:

1. Brainstorming
2. Scoping
3. Preliminary Proposal
4. Final Proposal
5. Kick-Off Charette
6. Check-Ins
7. Submission
8. Deliverable





Global Real Estate DEI Survey 2022



GLOBAL REAL ESTATE DEI SURVEY 2022

A survey of diversity, equity and inclusion practices and benchmarking metrics among commercial real estate firms globally

ANREV **fp** Ferguson Partners **INREV** **NAREIM** **NCREIF** **PDREA** **REALPAC** **ULI** Urban Land Institute

Global Real Estate DEI Survey 2022

REGIONAL CHARACTERISTICS: EUROPE

Which of the following is your organization doing to provide DEI-related training and development? See Q20 chart 2 on page 68 for the full results

	Currently implemented	Plan to implement in the next 12 months	No current plans to implement
Communicating the importance of DEI to employees	92.3%	7.7%	–
Providing anti-harassment/anti-discrimination training	73.1%	15.4%	11.5%
Providing conscious and unconscious bias management training	73.1%	26.9%	–
Providing soft skills training	91.6%	4.2%	4.2%

the C-suite. In Europe, almost a quarter of respondent firms put decisions in the hands of the board of directors. The second choice is the C-suite, followed equally by HR or a senior-level DEI employee, which could be a chief diversity officer. Only 3.8% have the DEI team and the C-suite working together to direct the DEI program.

Although Europe on average leads on many DEI measures, more than 65% of firms do not have any employees dedicated to DEI within the organization. However, firms that do have

dedicated employees for the most part elevate them to the executive management or senior level at the highest rate out of the three regions. They also report the lowest engagement with external consultants for help implementing part or all of the DEI program.

One of the ways firms can find talented employees from underrepresented groups is to broaden their nets beyond traditional avenues of recruitment such as prestigious universities or investment banking programs. Almost eight in ten European respondents are using this

strategy, primarily by being 'flexible' on educational and experience prerequisites and by creating scholarships/internships to increase the underrepresented in candidate pools.

Once hired, keeping diverse talent can be a challenge. In addition to work/life balance programs, which all European respondents offer, firms say they are improving the clarity of job performance reviews and putting in place anti-discrimination policies. Areas of improvement within the next 12 months include tying managers' performance to diversity retention, having clear criteria for promotion at all levels of the firm, putting people from underrepresented groups into succession management pathways, and being transparent when it comes to promotion decision-making.

Europe is the region with the lowest average proportion of women in CRE, at 39.5% overall. While women comprise 57.2% of junior staff, the number falls to 12.9% at the executive management level. Only 12.1% of senior-level promotions were of women.

For data on European demographics, see p.108

Global Real Estate DEI Survey 2022

REGIONAL CHARACTERISTICS: ASIA-PACIFIC

Which of the following is your organization doing to recruit or hire more individuals from underrepresented groups? See Q18 chart 2 on page 56 for the full results

	Currently Implemented	Plan to implement in the next 12 months	No current plans to implement
Presenting your company as a representative workplace to potential employees	91.7%	8.3%	–
Broadening or being flexible on educational and experience requirements for new hires	83.3%	–	16.7%
Ensuring there are individuals from underrepresented groups in the candidate pool before making a hiring decision	91.7%	–	8.3%
Reaching outside the CRE Industry to increase your pool of candidates from underrepresented groups	75.0%	–	25.0%
Creating scholarships/internships to increase the number of underrepresented individuals in candidate pools	91.7%	–	8.3%

actively collect employee demographic data and periodically review inputs.

Training is common practice with eight out of 10 firms on average communicating the importance of DEI policies to staff, and providing anti-harassment and discrimination courses, as well as soft skills training. There are training areas where participants are looking to improve over the next 12 months: roughly a quarter of Asia-Pacific firms on average say they intend to introduce DEI discussion topics and round-

tables and inclusive leadership training. Some 30.8% said they planned to bring in regular scheduled diversity training.

Once through the door, firms must work mindfully to keep and promote more individuals from underrepresented groups. On average, a very high percentage of firms set clear expectations, offer work/life balance initiatives, have anti-discrimination policies, evaluate employees based on pre-determined criteria, and provide DEI-related training.

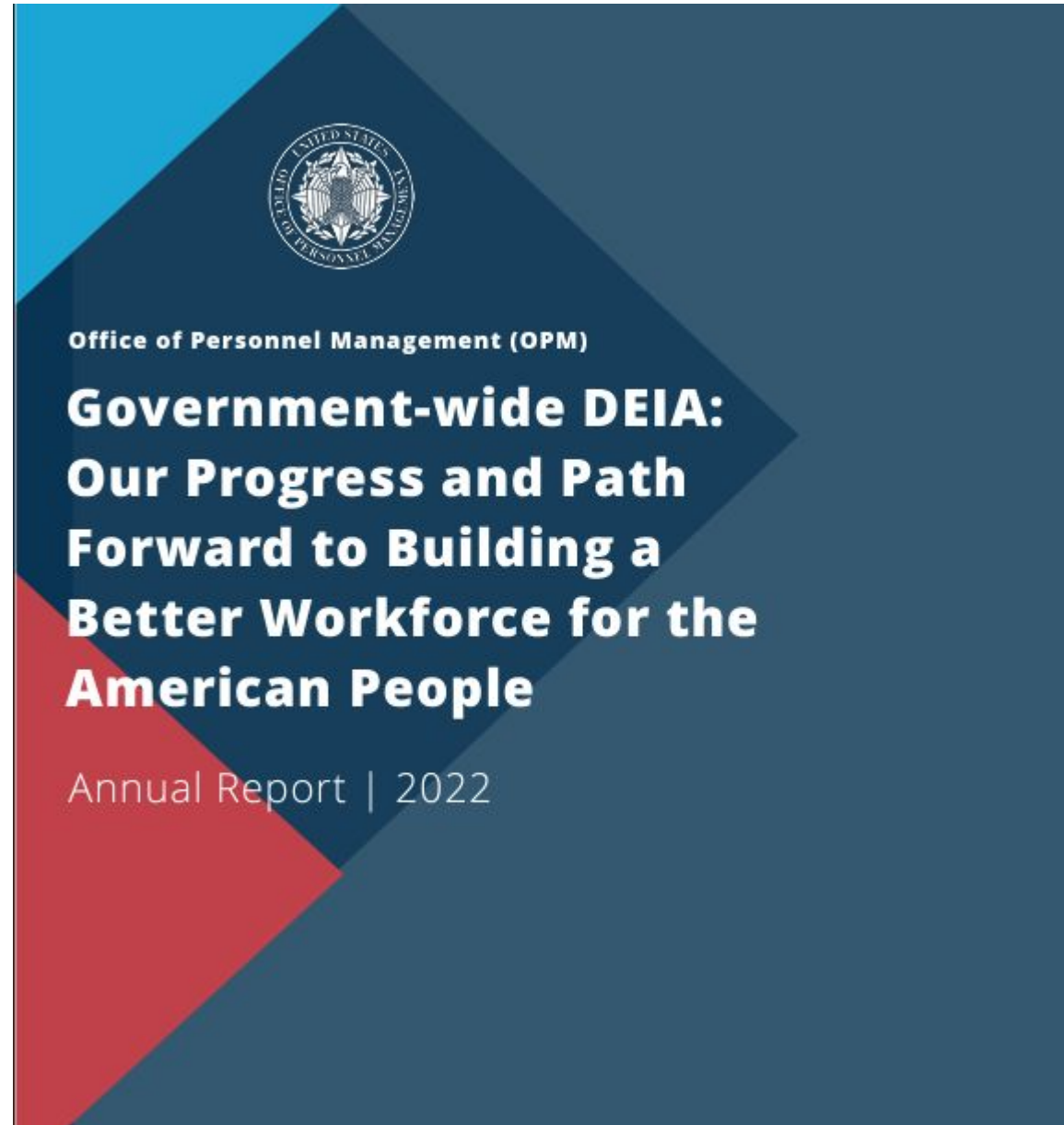
When it comes to the policy of pay equality, 66.7% of respondents analyze the relevant data, and a further 8% say they will do so within 12 months. The same proportion is currently using redemption strategies, such as making pay adjustments. However, working to increase pay transparency levels is less popular, with only 16.7% of companies on average doing so at present.

Last year, just 8% said they were trying to collect gender identity of employees who identify as nonbinary. This year the proportion has risen to almost 25%.

Overall, there is an equal number of men and women at the average firm in the Asia-Pacific CRE industry, but the proportion falls from 67.4% of women at the junior level to 23.9% at the board of directors.

The option to work from home is the lowest among all regions. 16.7% of firms do not offer this flexibility, and less than half of firms offer this option to all employees.

For details on Asia-Pacific demographics, see p. 101



OPM DEIA ANNUAL REPORT 2022

DEIA is a mission-critical imperative for the Federal government, and the Demographic Diversity Data section of this report provides transparency into Federal workforce demographic data. OPM is committed to expanding methods to collect data on underserved communities and will also share methods and strategies it plans to implement to begin filling gaps in demographic data collection.

The Federal DEIA Accomplishments section highlights programs and initiatives prompted by the Government-wide Strategic Plan to Advance DEIA in the Federal Workforce. Developed by the DEIA Initiative, the Government-wide Strategic Plan:

The strategic plan also incorporates the 11 priorities

