



Catalyzing a Diverse Energy Efficiency Workforce

Thursday, July 11

11:00 AM – 12:30 PM



Speakers

- **Shelly Pottorf**, Prairie View A&M University
- **Renee McClure**, National Grid
- **Tracey Woods**, American Association of Blacks in Energy (AABE)
- Moderator: Nathaniel Allen, DOE

Shelly Pottorf

Prairie View A&M University

U.S. DEPARTMENT OF
ENERGY



2019 Summit

Catalyzing a More Diverse Energy Efficiency Workforce

Shelly Pottorf, AIA, CPHC, LEED AP

Assistant Professor



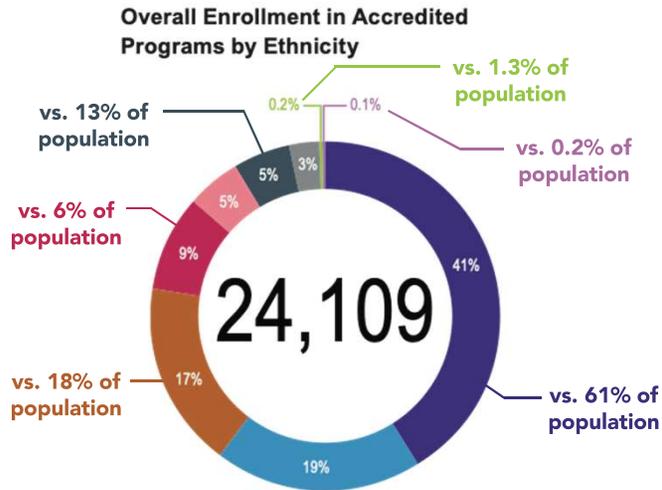
PRAIRIE VIEW
A&M UNIVERSITY

School of Architecture

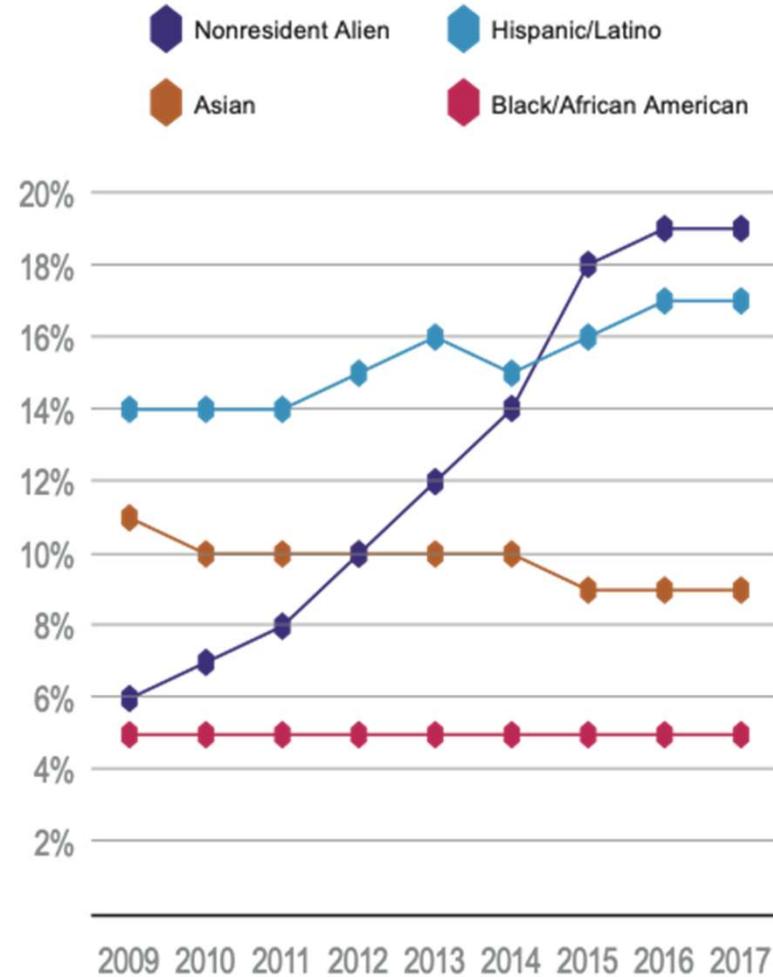
Principal



The National Architectural Accrediting Board

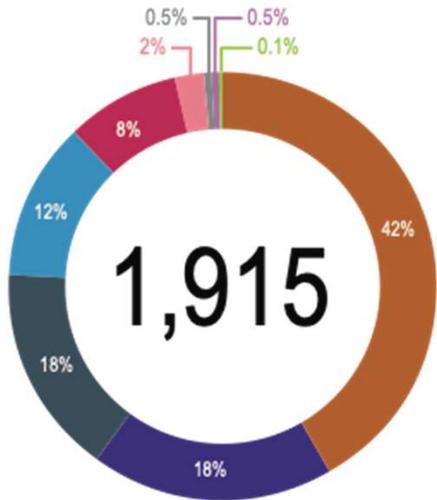


9,887 White	4,774 Nonresident alien	4,005 Hispanic/Latino
2,066 Asian	1,254 Race/Ethnicity unknown	1,246 Black/African American
775 Two or more races	62 American Indian /Alaska Native	40 Native Hawaiian /Pacific Islander



The National Architectural Accrediting Board

Enrollment in Accredited Programs by Ethnicity at Minority Serving Institutions



803
Hispanic/Latino

349
White

303
Black/African
American

231
Nonresident
alien

163
Asian

43
Race/Ethnicity
unknown

10
Two or more
races

10
Native Hawaiian
/Pacific Islander

3
American Indian
/Alaska Native

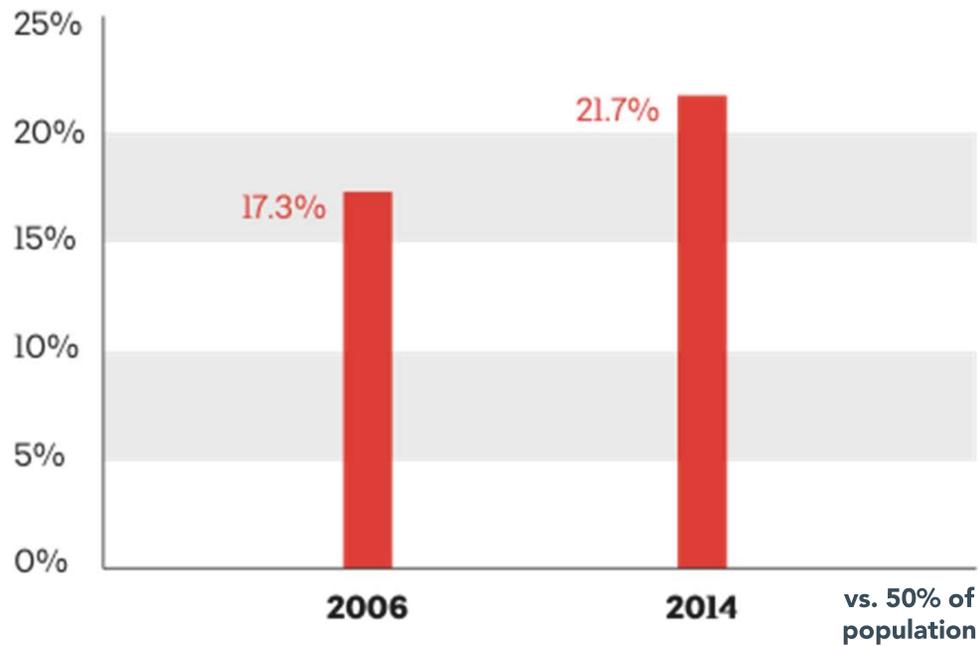
Total Program Enrollment by Ethnicity

	TOTAL	MSIs ONLY	PERCENTAGE OF TOTAL AT MSIs
American Indian or Alaska Native	62	3	4.8%
Asian	2,066	163	7.8%
Native Hawaiian or other Pacific Islander	40	10	25%
Black or African American	1,246	303	24.3%
Hispanic/Latino	4,005	803	20%
White	9,887	349	3.5%
Two or more races	775	10	1.2%
Nonresident alien	4,774	231	4.8%
Race and ethnicity unknown	1,254	43	3.4%

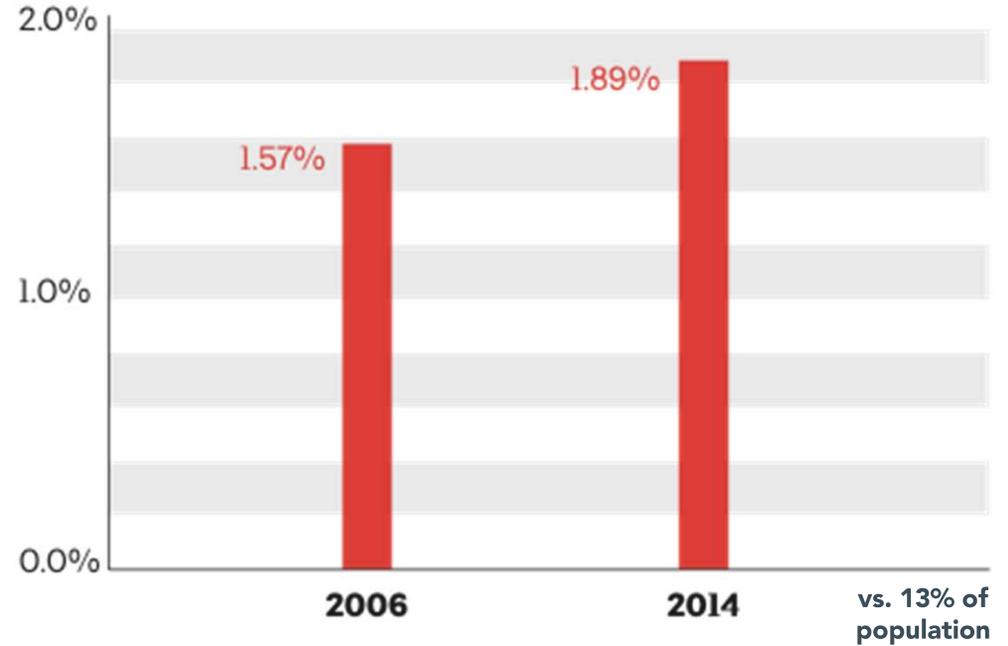
American Institute of Architects

Women AIA and Associate Members

33% growth in 8 years

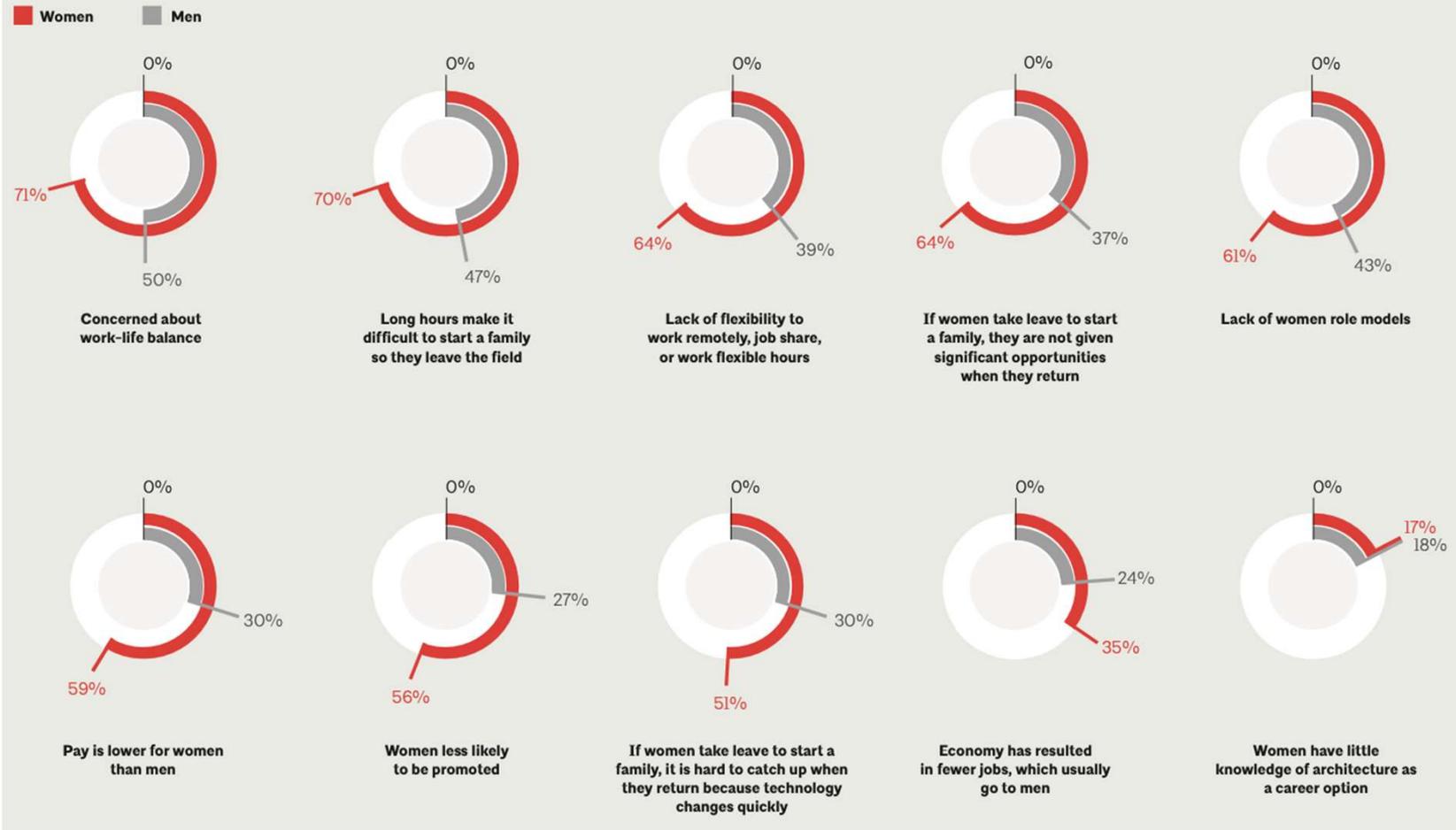


African American AIA and Associate Members



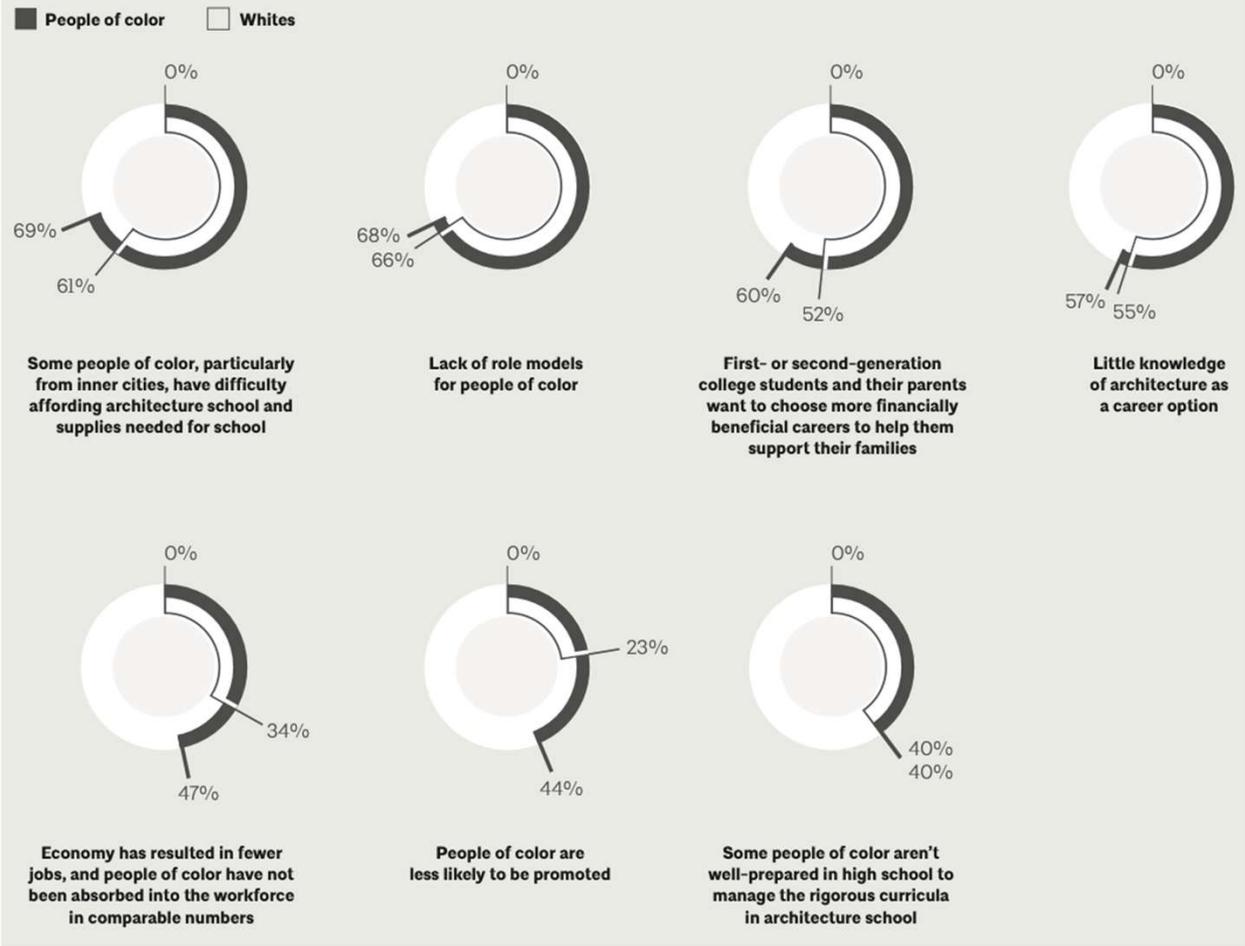
American Institute of Architects

Figure 2: Perceived factors contributing to an underrepresentation of women in the field of architecture



American Institute of Architects

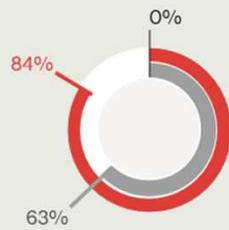
Figure 4: Perceived factors contributing to an underrepresentation of people of color in the field of architecture



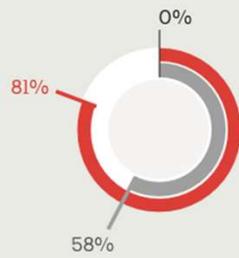
American Institute of Architects

Figure 9: Effective ways of attracting and retaining women in the field

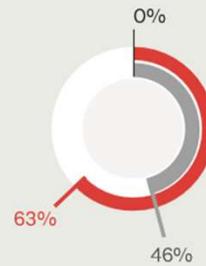
■ Women ■ Men



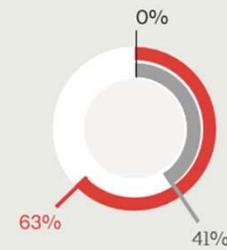
Promote change in office culture that allows better work-life balance



Increase job flexibility (working remotely, job sharing, and working flexible hours)



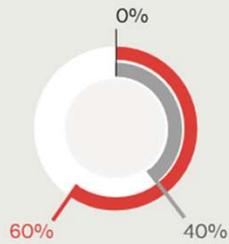
Develop a mentorship program for women in firms



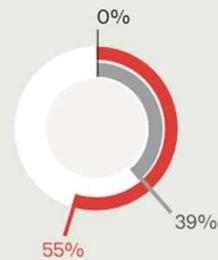
Offer credentials for architects who wish to return to the profession after taking an extended leave of absence so that they are caught up when they return



Provide clear, written criteria for promotion



Offer industry-funded college scholarships for women interested in studying architecture



Attract more women professors to teach in accredited architecture programs



Increase community outreach into middle and high schools by university architectural programs

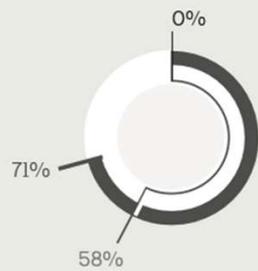


Increase industry outreach to K-12 students through school curricula, extracurricular clubs and activities, weekend summer programs, etc.

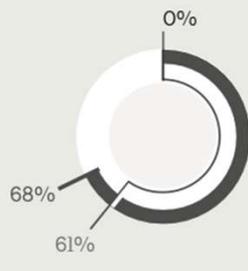
American Institute of Architects

Figure 10: Effective ways of attracting and retaining people of color in the field

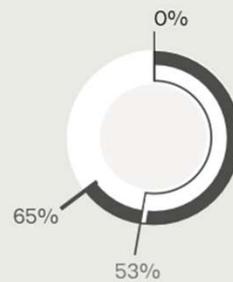
■ People of color □ Whites



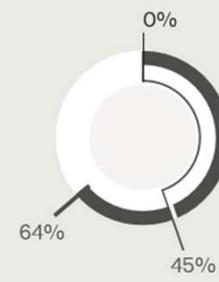
Offer industry-funded college scholarships for people of color interested in studying architecture



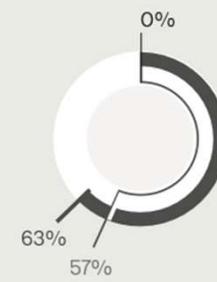
Increase community outreach into middle and high schools by university architectural programs



Attract more professors of color to teach in accredited architecture programs



Expand industry support for National Organization of Minority Architects (NOMA)



Increase industry outreach to K-12 students through school curricula, extracurricular clubs and activities, weekend summer programs, etc.



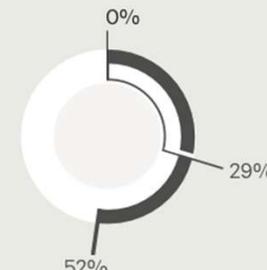
Provide clear, written criteria for promotion



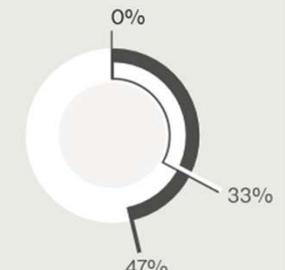
Develop a mentorship program for people of color in firms



Create support system for people of color at architecture schools



More training/continuing education courses for firms in racial equity



Perform routine performance reviews based upon written performance evaluations



PRAIRIE VIEW
A&M UNIVERSITY

: an HBCU founded in 1876

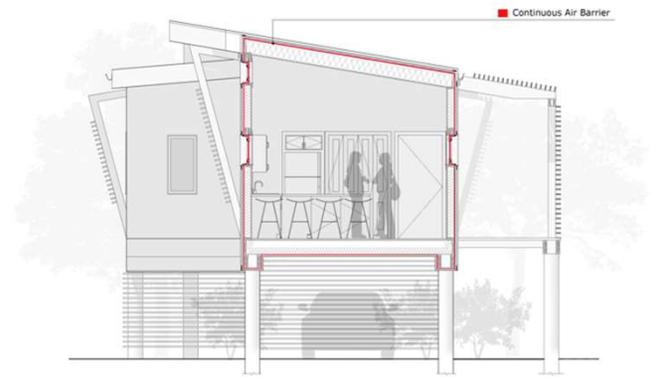
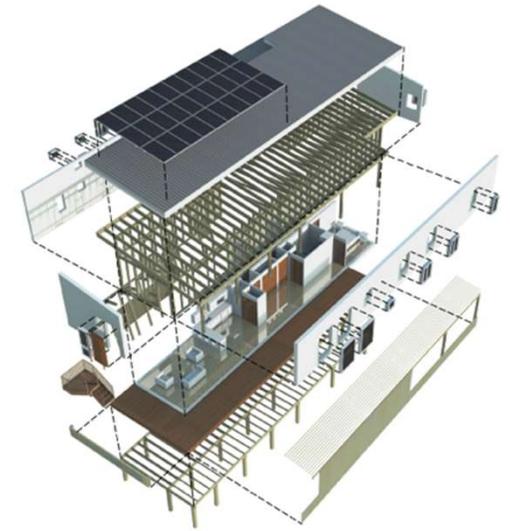


Sustainability Minor in SoA Curriculum

Theoretical Sequence	Curriculum
Sustainable Buildings	principles, metrics, rating systems building science fundamentals traditional passive design
Ecology and Man	systems thinking, environmental + social justice
Regenerative Design	premises, principles, process
Technical Sequence	Curriculum
Net Zero Energy Design I	climate literacy building science fundamentals traditional passive design
Net Zero Energy Design II	Certified Passive House Consultant Training
Energy Modeling	Wufi-Passive, THERM, Sefaira, Energy-Plus
Design Sequence	Curriculum
Architectural Design VII	net zero, affordable residential infill design
Architectural Design VIII	net zero, regenerative commercial design
Solar Decathlon Design Competition	above projects continued

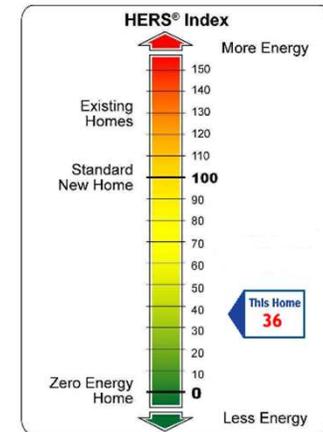
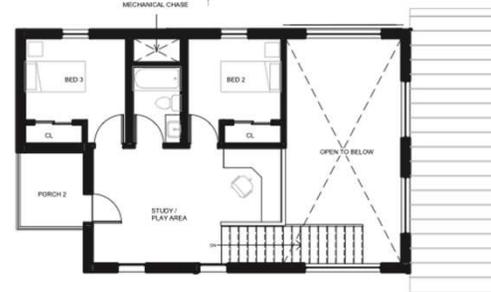
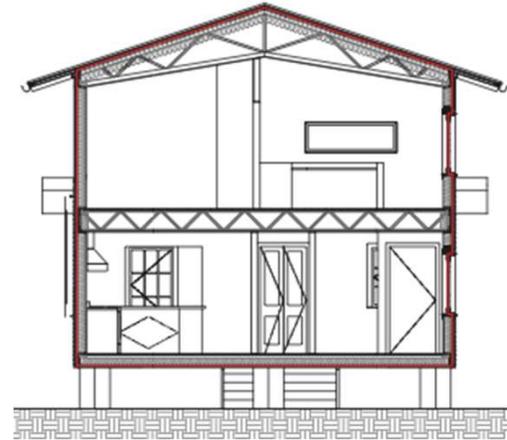
Race to Zero Competition

Stilted Shotgun
2015 Race to Zero
Design Excellence Award



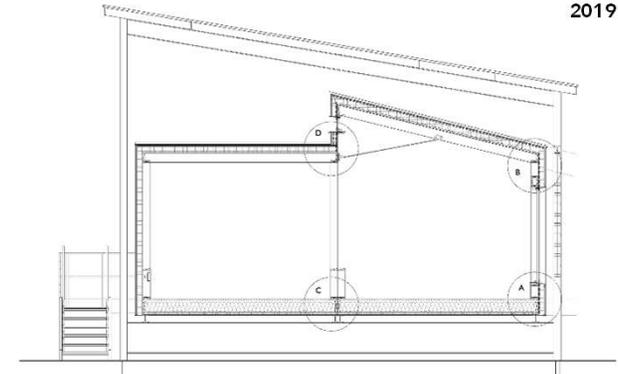
Race to Zero Competition

Double Barrel
2016 Race to Zero
Grand Award Winner



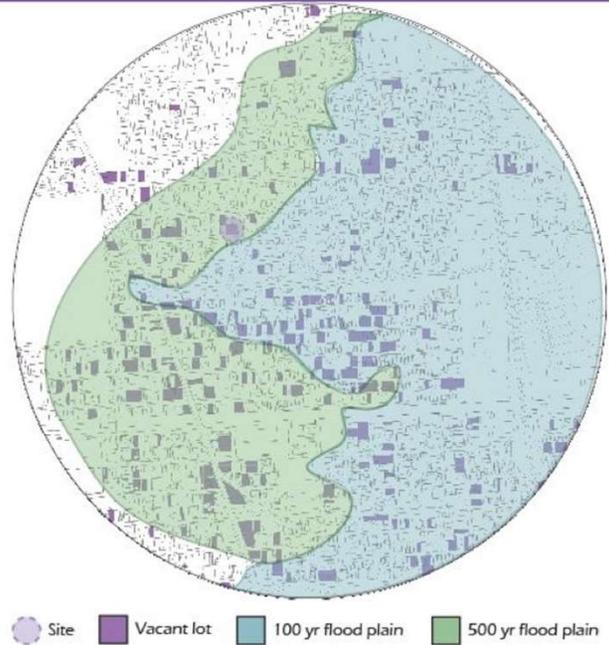
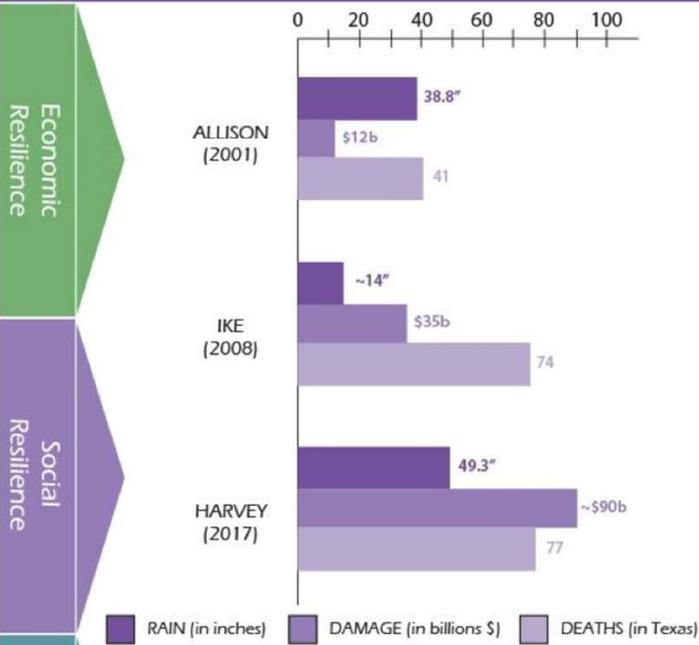
Race to Zero Competition

The Fly Flat
2018 Race to Zero
Grand Award Winner
2019 COTE Top 10



Existing Conditions

Team Mod Squad



Vacant Lots in Independence Heights, TX
 Total Vacant Residential Lots: 768
 Total Lot Values: \$202,306,218



Double lot selected for demonstration project:
 Address:
 509 E 41st Street, Houston, TX 77022



Community Engagement

Architecture

Constructability

Financial

Energy & Envelope

MEP & IAO

Innovation

Resilience Goals

Team Mod Squad
Prairie View A&M University



Economic Resilience
Social Resilience
Environmental Resilience

Economic

- Affordability
- Ownership
- Address vacancy
- Economically healthy neighborhood

Environmental

- Address flooding
- Surviving hurricanes and flooding events with minimal damage
- Man/Nature Connection
- Health
- Net zero residence

Social

- Social Agency
- Community connectivity/relationship development
- Health

Architecture

Constructability

Financial

Energy & Envelope

MEP & IAQ

Innovation

CPHC Training Results

Year	# of NZ II Students*	#CPHC Passers	%	#NZ II Students on RtZ Team	#CPHC Passers on RtZ Team	#CPHC Passers who Took NZ I
2015	16	1	6.25%	3	1 (100%)	0 (0%)
2016	18	1	5.55%	3	1 (100%)	0 (0%)
2017	13	2	15.38%	5	2 (100%)	1 (50%)
2018	12	2	16.67%	3	2 (100%)	3 (67%)
2019	15	2	13.33%	NA	NA	2 (13%)

Where are they now?

Nichole Thomas, CPHC: Building Science Consultant @ Morrison Hershfield

Alexis Borman, CPHC: Intern Architect @ Heights Venture Architects

Jabbar Cobbs, CPHC: Intern Architect @ PBK

Shannen Martin, CPHC: Sustainability Specialist @ HOK; captained PVAMU 2018 Race to Zero Team

Cynthia Suarez-Harris, CPHC: Captained PVAMU 2019 Solar Decathlon Team

Ledell Thomas, CPHC: Project Architect PVAMU 2019 Solar Decathlon Team

Thank You!

Shelly Pottorf, AIA, CPHC, LEED AP
spottorf@architend.com

Renee McClure

National Grid

U.S. DEPARTMENT OF
ENERGY

Better Buildings Summit 2019

Catalyzing a Diverse EE Workforce

Renee McClure

July 11, 2019

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Agenda

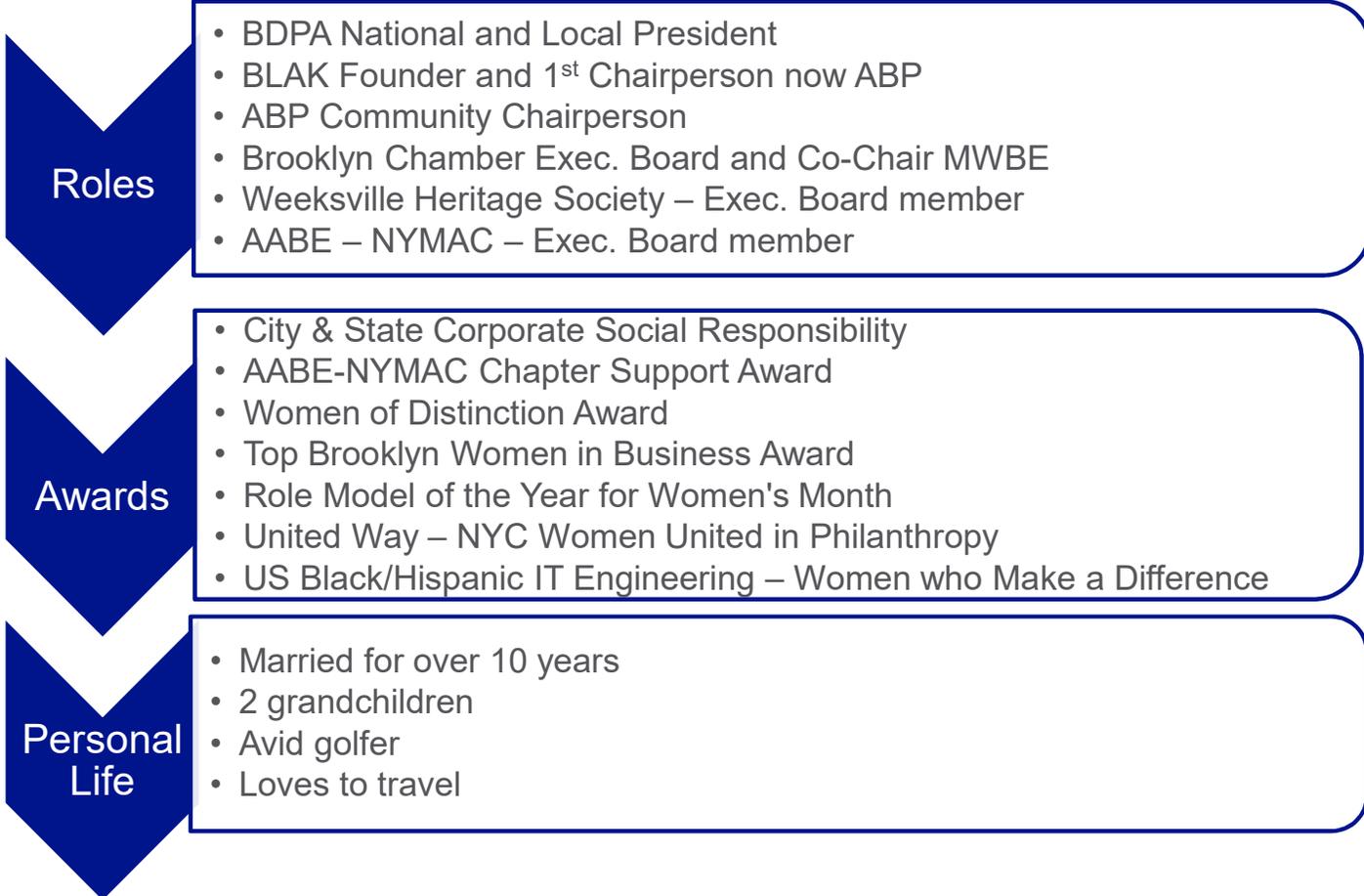
- ➔ Speaker Renee McClure
- ➔ About National Grid
- ➔ Inclusion and Diversity Moment
- ➔ Why is Diversity important?
- ➔ Diversity at National Grid
- ➔ Best Practices
- ➔ Challenges Facing Diversity

Renee McClure



national**grid**





Roles

- BDPA National and Local President
- BLAK Founder and 1st Chairperson now ABP
- ABP Community Chairperson
- Brooklyn Chamber Exec. Board and Co-Chair MWBE
- Weeksville Heritage Society – Exec. Board member
- AABE – NYMAC – Exec. Board member

Awards

- City & State Corporate Social Responsibility
- AABE-NYMAC Chapter Support Award
- Women of Distinction Award
- Top Brooklyn Women in Business Award
- Role Model of the Year for Women's Month
- United Way – NYC Women United in Philanthropy
- US Black/Hispanic IT Engineering – Women who Make a Difference

Personal Life

- Married for over 10 years
- 2 grandchildren
- Avid golfer
- Loves to travel

About National Grid

nationalgrid



National Grid

- International energy company based in the northeast US and the UK
- One of the world's largest investor owned utilities - 26,000 employees; and \$52b in assets
- Major presence in the northeast:
 - Over 7 million retail customers in New York and New England
 - 15,000 employees
 - \$18b rate base



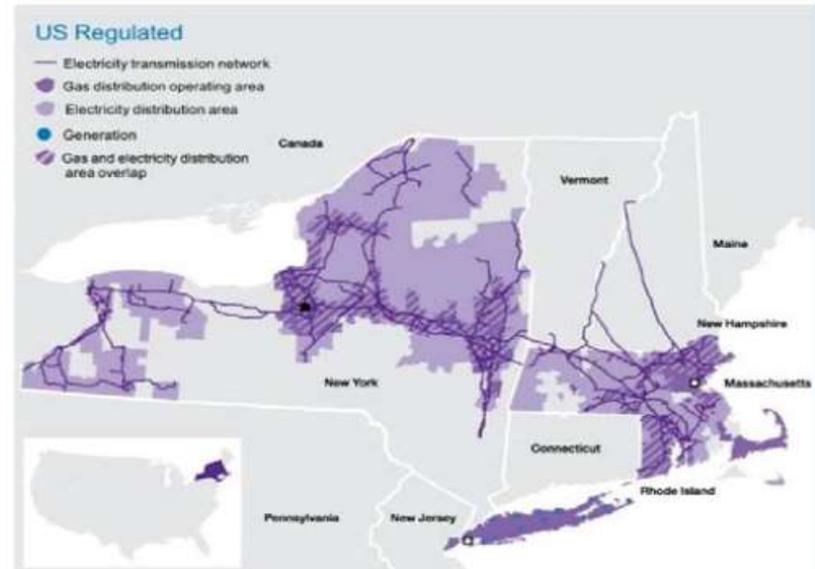
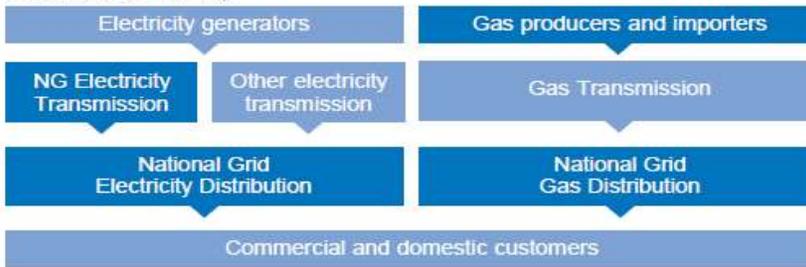
National Grid – US



New York Stock Exchange (ADR) **NGG**

National Grid in the US

In the US, National Grid is primarily a distribution company with assets in New York, Massachusetts and Rhode Island. National Grid also has electricity transmission assets in those states as well as in New Hampshire and Vermont. On Long Island, NY, National Grid operates 12 generating units (with long-term contracts to LIPA).



Inclusion and Diversity Moment



What do you see?



Now what do you see?



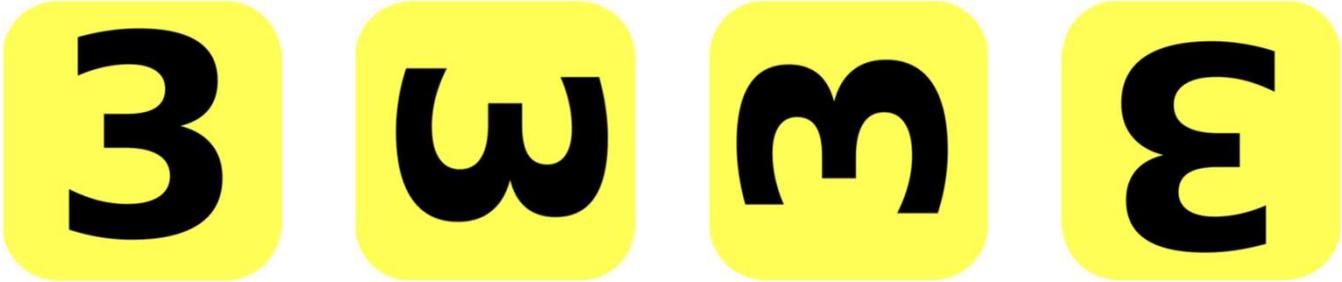
Now what do you see?



Now what do you see?



Perspective is everything!



Why is Diversity Important?



Inclusion's Effect on Talent - Metrics

Capturing
External Ideas



Inclusion's effect on talent.

80% of respondents say inclusion is an important factor in choosing an employer.



72%

of respondents would leave or may consider leaving an organization for a more inclusive one.

30%

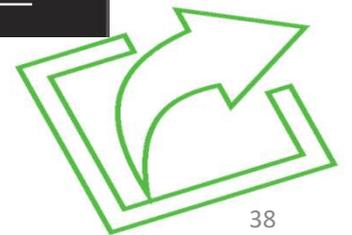


75%

of Millennials surveyed said they have already left a job for a more inclusive culture at another organization.

of senior management respondents said they would leave or may consider leaving jobs for more inclusive organizations

Source: Copyright © 2017 Deloitte Development LLC. All rights reserved



Inclusion's Effect on Talent - Metrics

Capturing
External Ideas



Leaders' actions speak louder than programs.



71%

of respondents said they would prefer an organization with leadership that consistently demonstrates inclusive behaviors over an organization that offers numerous inclusion initiatives but whose leaders did not demonstrate inclusive behaviors consistently.

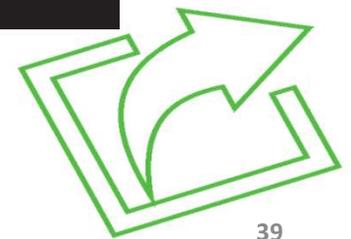
32%

believe senior leadership has the greatest impact on whether a workplace is inclusive

34%

everyone plays a role in impacting whether a workplace is inclusive

Source: Copyright © 2017 Deloitte Development LLC. All rights reserved

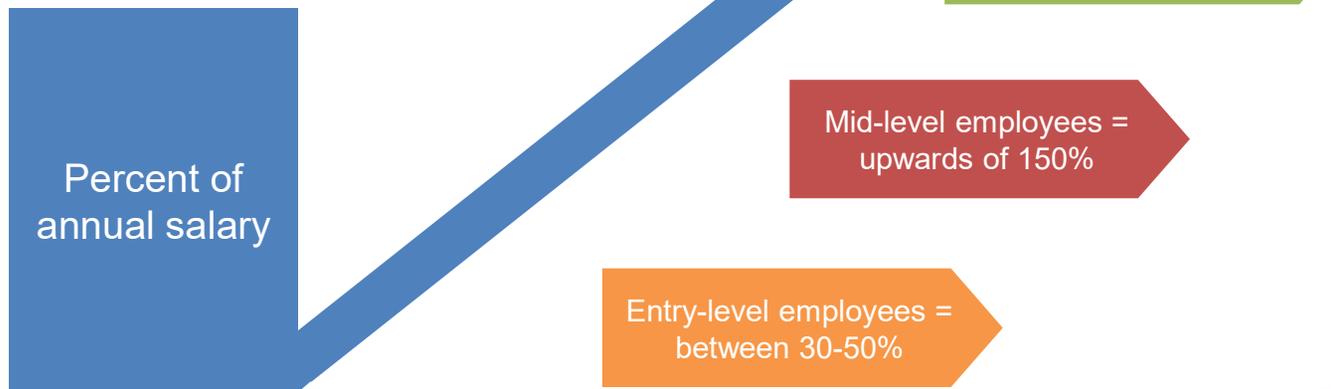


Employee Turnover Costs - Metrics

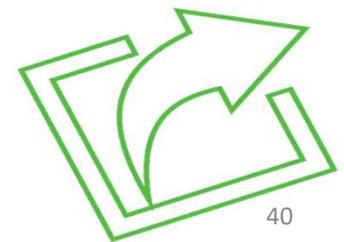
Capturing
External Ideas



When you consider all of the costs associated with employee turnover – including interviewing, hiring, training, reduced productivity, lost opportunity costs, etc. – here's what it really costs an organization:



Source: <https://www.tlnt.com/retaining-talent-is-more-cost-effective-than-hiring/>



Inclusion & Diversity Retain

Capturing
External Ideas

Creative &
entrepreneurial



Employee
Involvement



Knowledge
Sharing



Prioritize and Practice Inclusive Leadership

Reminder of Inclusive Leadership Behaviors:



Inclusion & Diversity

Inclusive Culture

Capturing
External Ideas



Creative &
entrepreneurial



Employee
Involvement



Knowledge
Sharing



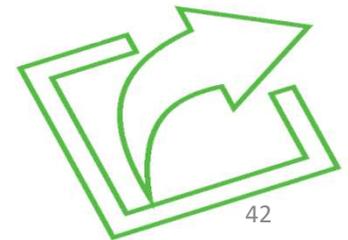
What Is Inclusive Culture?

- Employees feel connected and valued, and that they belong in the culture
- Employees can present their authentic selves

- Employees feel that work outcomes, processes, and communications are fair
- Employees feel they are treated with dignity and regard by others



- Leaders are open to “bad news”
- Asking questions is encouraged
- Leaders are open to new ideas and innovative approaches
- Employees have influence over job tasks
- Teams embrace change
- Employees are frequently given stretch opportunities
- Employees who learn new knowledge / skills are valued



Diversity at National Grid Beyond the Metrics



national**grid**

What does Diversity mean to National Grid?

At National Grid, we are developing a more engaged and diverse workforce that believes:

- Fostering inclusion and acknowledging diversity is everyone's responsibility.
- Open, honest and respectful communication is the cornerstone of a successful business.
- Leveraging inclusion and diversity is a business imperative.
- Integrating supplier diversity in our supply chain.
- Recognized as one of the 2019 Top Utilities for Diversity - Diversity Inc

National Grid Programs

Graduate Development Program (GDP)

Energy Pipeline Program

Community College Programs

- National Grid Gas Certification programs
- Customer Service Program
- Internships (Summer/year round)
- Energy Tech High School

Sponsorships

- AABE Summer Energy Academy (SEA)
- NYC Mayors – Ladders for Leaders
- New York University - K-12 Program
- Brooklyn Tech High School STEM Program
- BAM Technopolis

College Utility Training Programs (US)

National Grid partnership with colleges

College programs create a resource pool for hiring

Programs leverage knowledge and skills of National Grid Academy instructors.



College Utility Training Programs (US)

Active college programs: 8 *

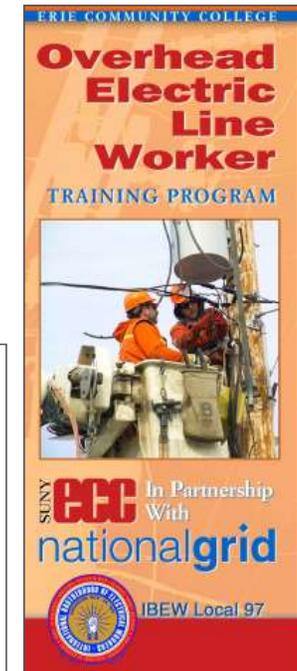
Electric programs: 6

Gas programs: 2 (DNY, NE)

* First program started in Fall 2006 in UNY (Erie CC)

Programs in development: 7

- Electric program: 1
- Gas programs: 3 (UNY)
- General Utility programs: 2



Employee Resource Groups (ERGs)

- **Alliance of Black Professions (ABP)**
- **Asian Leadership Association (ALA)**
- **Enabling Disability Confidence**
- **Hispanic Professional Association**
- **Veterans**
- **Women In Networks (WiN)**
- **PRIDEUSA**

And so much more....

Supplier Diversity

What is Supplier Diversity?

Supplier Diversity is the practice of including small and diverse-owned businesses into an organization's supply chain. It is a business strategy to help create an inclusive and diverse supply chain.

Why is it Important?

- Access to new and creative ideas to enable innovation
- Drives competition between suppliers
- Showcases the company's commitment to the economic growth of the communities
- Improves corporate culture, support social responsibility; retain and attract top talent
- Supplier diversity supports the communities in which we operate and represents National Grid's core values

Best Practices



national**grid**

Inclusion & Diversity Best Practices

Inclusive Culture

Capturing
External Ideas



Creative &
entrepreneurial



Employee
Involvement



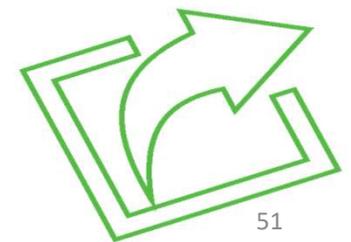
Knowledge
Sharing



How to build an inclusive culture?

- Treat I&D as Business Critical, Not Compliance Necessary
- Move Beyond Diversity to Inclusion and Diversity
- Prioritize Inclusive Leadership
- Embed I&D into All Talent Practices
- Provide I&D Resources that Encourage Individuals to Take Action
- Drive Accountability, Not Metrics Tracking
- Implement Employee Resource Group

Source: Bersin by Deloitte, 2017.



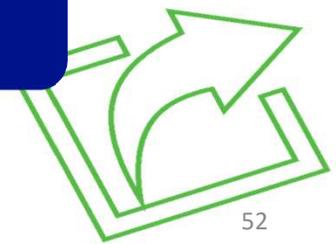
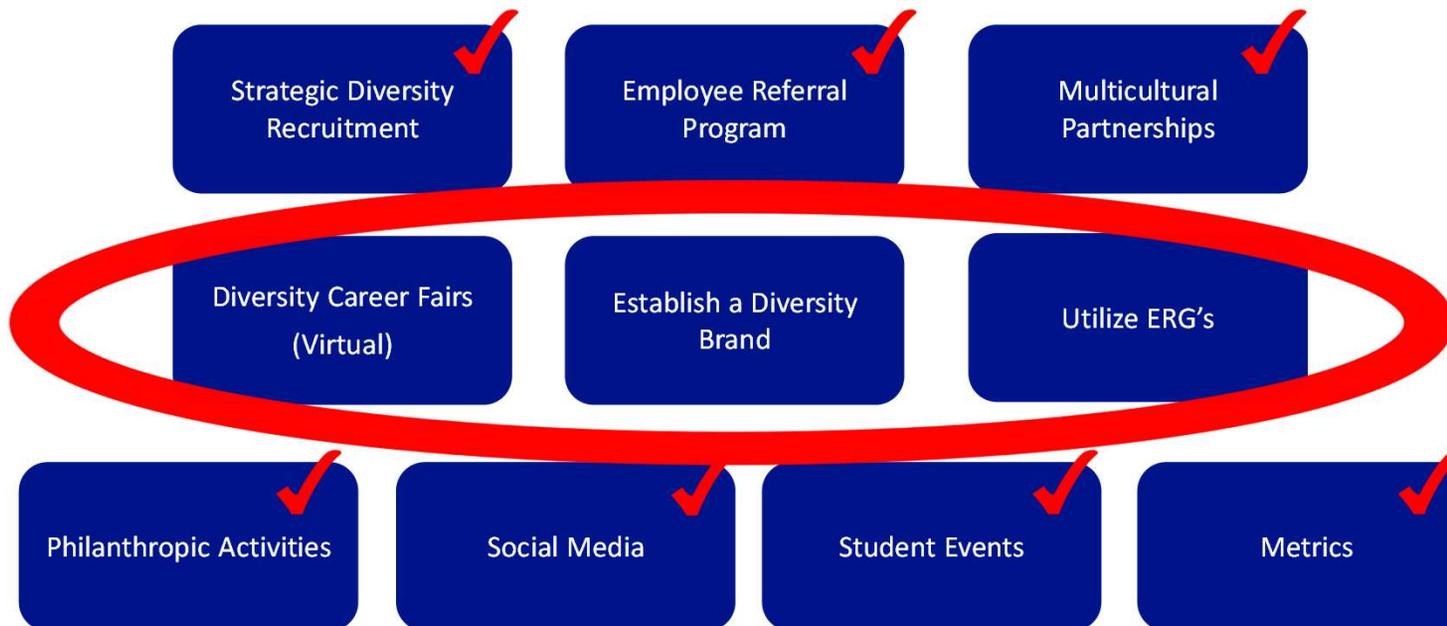
Inclusion & Diversity Best Practices

Creative & entrepreneurial



Attract / Recruit

10 Strategies for Attracting and Recruiting Diverse Talent



Inclusion & Diversity Best Practices

Employee
Involvement



Develop

What employees need from you:

Understand the Individual

- Observe behaviors
- Ask Questions

Areas of Opportunity

- ERG Mentoring Program
- Reverse Mentoring Program
- Leadership Development Programs

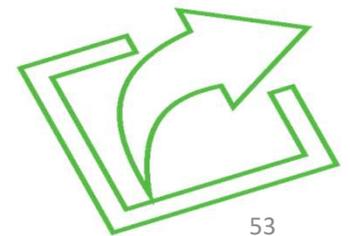
Provide Perspective

- Reputation
- Reality

Create Connections

Opportunities
(Cross-functional projects, shadowing other departments, organizing events)

People
(Career Communities)



Challenges Facing Diversity

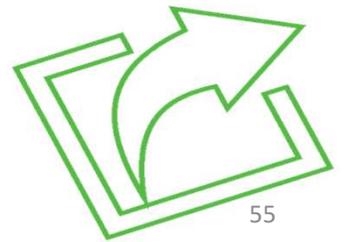


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Key Takeaways: Inclusive Leadership

Self-Awareness

Leaders as Judges
of Their Own
Inclusiveness



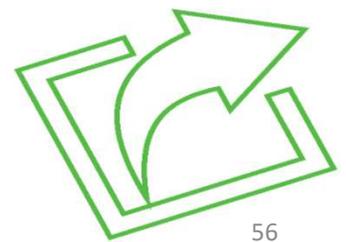
Key Takeaways: Inclusive Leadership

Self-Awareness

Leaders as Judges
of Their Own
Inclusiveness

Changing Priorities

Moving Beyond the
Metrics and
Training



Key Takeaways: Inclusive Leadership

Self-Awareness

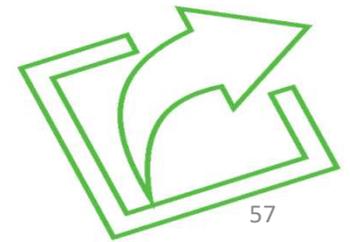
Leaders as Judges of
Their Own Inclusiveness

Changing Priorities

Moving beyond training
and metrics

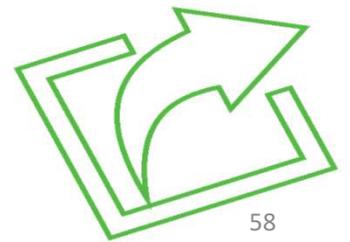
Inclusion Happens in Silos

Sharing Internal
Best Practices



Thank you for your time!

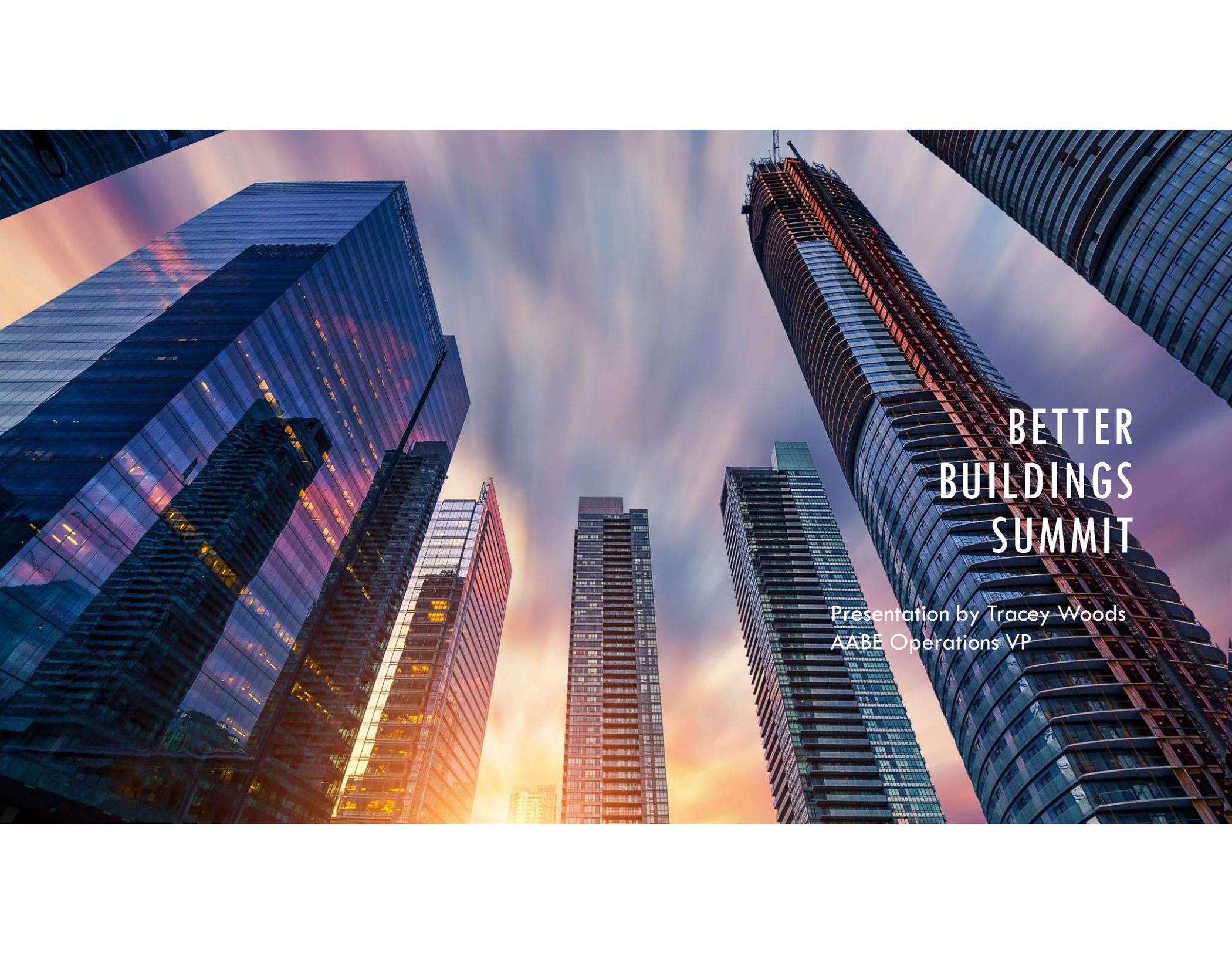
Any Questions?



Tracey Woods

AABE

U.S. DEPARTMENT OF
ENERGY



BETTER BUILDINGS SUMMIT

Presentation by Tracey Woods
AABE Operations VP

AABE HISTORY



Founded in 1977 during the Carter Administration



Preceded the US Department of Energy



Carter's advisory councils lacked diversity (no people of color or women)

THE AABE MISSION

To provide direct input into the deliberations and developments of energy policies, regulations, emerging technologies, and environmental issues.

OUR SERVICES



Policy

Education
Advocacy
Summit



Professional Development

Annual National
Conference
Webinars
Efficacy program



Scholarships, mentorship, BEAM

**AABE
ORGANIZATIONAL
STRUCTURE**

Board of Directors

**Paula Glover, President &
CEO**

**Tracey Woods, VP
Operations**

**Felicia Kelly, Director
Members Services & Events**

MEMBERSHIP

6 Regions (Northeast, Mid-Atlantic, Southeast, Southwest, Midwest, Western)



2000 Members

Energy company employees
(Oil & Gas, Electric/Gas
Utilities, Renewables)

Entrepreneurs

Services (legal, finance,
engineering, land surveying)

Regulatory, government,
legislative

CATALYZING A MORE DIVERSE ENERGY EFFICIENCY WORKFORCE



Helping America Navigate Opportunities for Jobs (HANOJ)



Multiple sectors including Healthcare (CVS), IT (Cisco), Logistics (Amazon)

Energy Efficiency training in partnership with Johnson Controls (JCI)



Adopted by PA Governor Tom Wolf for Workforce Development in Commonwealth



Pilot model for other states to optimize Workforce Development

PROGRAM COMPONENTS

Energy Efficiency projects for
Philadelphia School District
(Johnson Controls)



Energy Efficiency technician
training for students
(various counties)



HVAC Laboratory/Shops in
conjunction with Johnson
Controls (various counties)

EXPANDED SERVICES

Increase

Increase candidate awareness of career opportunities

Define

Define Career Pathways more clearly by industry and/or business

Integrate

Integrate businesses in the workforce process to better clarify their workforce needs, from assessments through retention strategies

EXPANDED SERVICES (CONT'D)



Increase retention and employment upward mobility



Provide tracking data to employers to show their ROI which will get more employers involved



Through our strategic alliances with trade and technical institutions, community colleges and universities, and K thru 12 schools, **HANOJ** is able to ensure “dual credit” opportunities, continuing education units (CEUs), certifications, badges, licenses and degrees

EXPANDING DIVERSITY AND INCLUSION

HANOJ, in an effort to broaden diversity and inclusion practices, partners with an array of organizations:

- Ethnic minorities
- Class qualified minorities (Veterans, Women, Disabled, LGBTQ)
- Human services organizations
- Law enforcement
- Subject Matter Experts and Thought Leaders
- Youth
- Qualified Seniors

As advisors, instructors, and mentors, these diverse supporters measure and value diversity practices of **HANOJ**.

HANOJ BRINGS FUNDING AND BUSINESSES TO THE TABLE

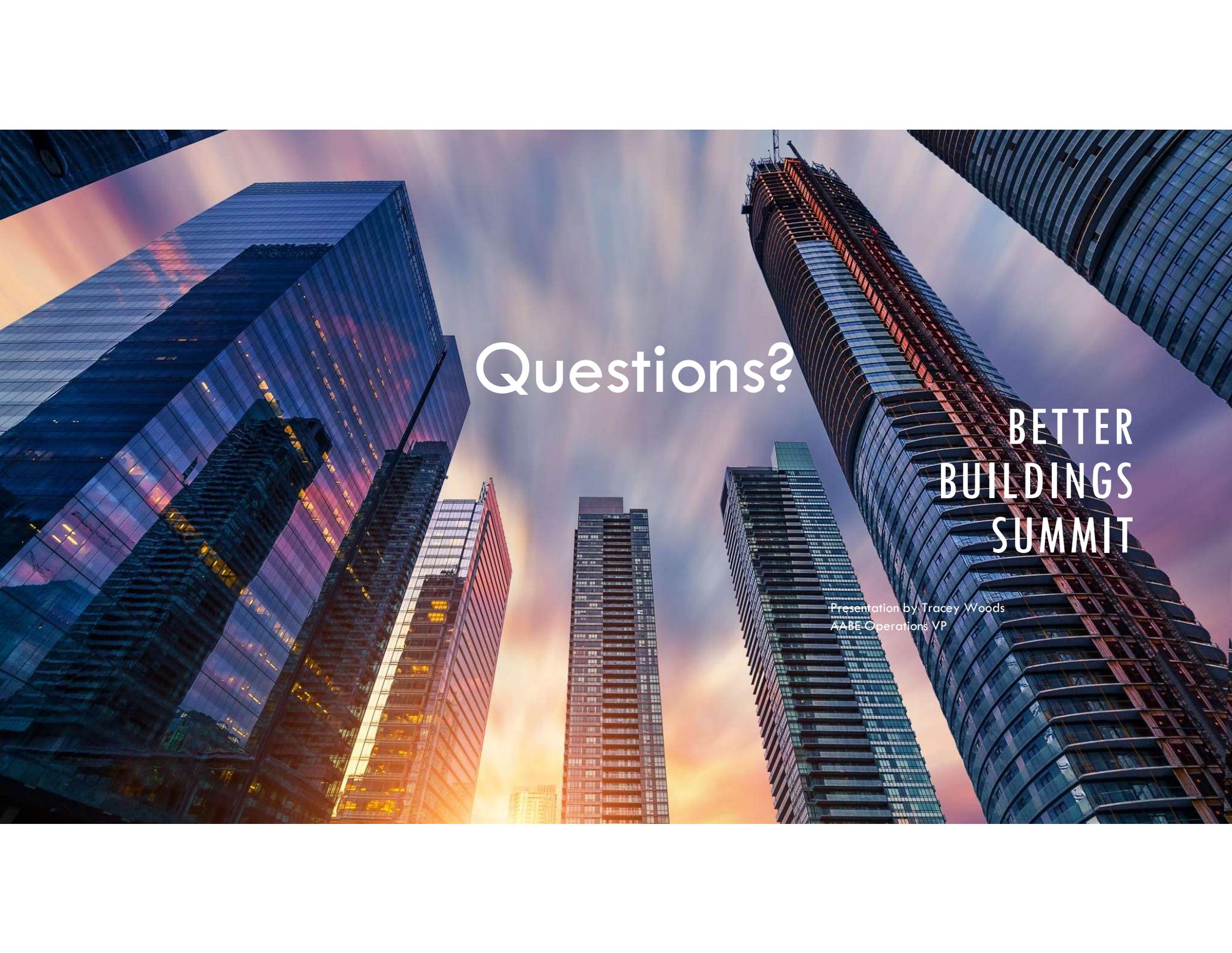
The **H2** portal is privately funded by many of the same employers that have open positions and need skilled workers

These employers are able to dictate their requirements and desires thru the portal, so they can access the *“right talent in real time”*

The **H2** portal is the tool that brings workforce, suppliers & vendors, and corporations together and allows them, collectively, to drive and monitor the workforce process, from beginning thru retention

EXPANDED SERVICES TO EXPANDED MARKETS

- **HANOJ** brings to the table a consortium of diverse businesses from across the country representing industries including:
 - Advanced Manufacturing
 - Healthcare
 - IT
 - Communication
 - Energy and Utilities
 - Transportation, Logistics and Distribution
 - Construction Facility Management
 - Retail



Questions?

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Thank You

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