U.S. DEPARTMENT OF
ENERGY

Office of
**ENERGY EFFICIENCY &
RENEWABLE ENERGY**

ISWG Energy Exchange Updates

EEx19 Recap and Overview

FEMP

12/03/2019

FEMP
Federal Energy Management Program

OVERALL REGISTRATION BY TYPE

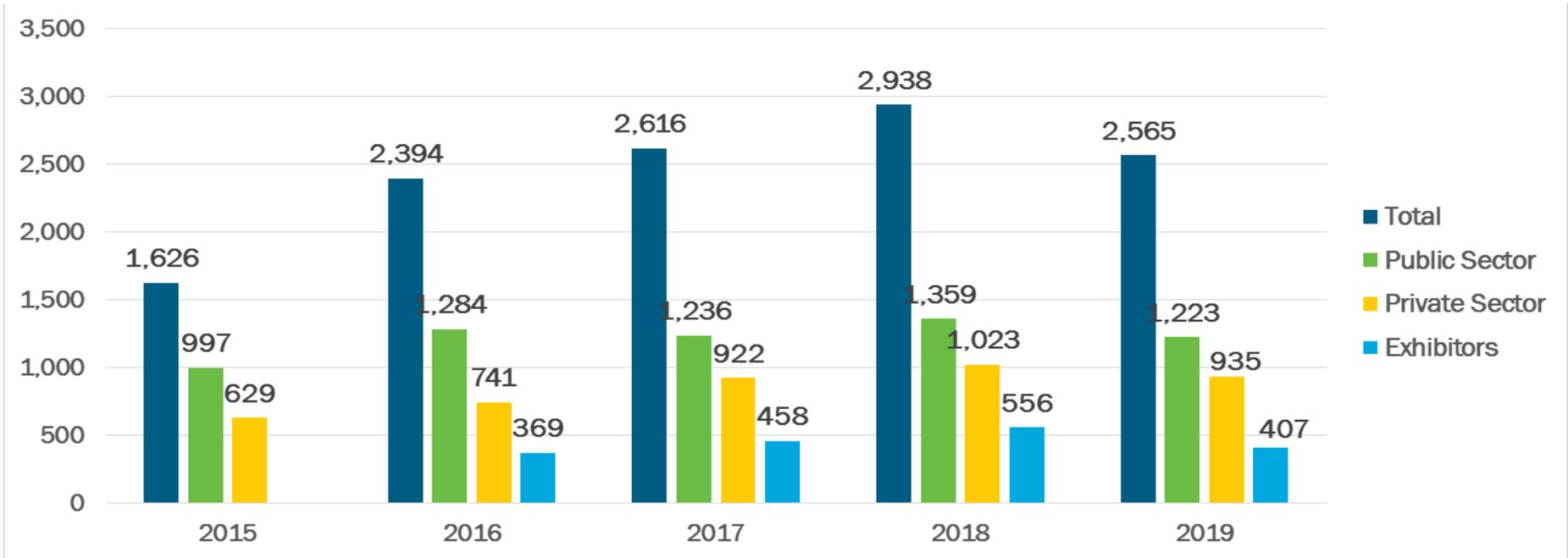| 2,565							
PUBLIC ATTENDEES					**PRIVATE ATTENDEES**		
1,223					1,342		
Federal Attendees		Nonfederal Attendees					
1,128		95					
FED Attendee	FED Speaker	NONFED Attendee	NONFED Speaker	NONFED Exhibitor	PRIVATE Attendee	PRIVATE Speaker	PRIVATE Exhibitor
935	193	62	17	16	821	114	407

Energy Exchange℠

Energy Exchange Registration: 2015–2019

Section 1: Registration Analysis

Type	2015	% Change 2015 to 2016	2016	% Change 2016 to 2017	2017	% Change 2017 to 2018	2018*	% Change 2018 to 2019	2019
Public Sector	997	↑28.8%	1,284	↓-3.7%	1,236	↑9.9%	1,358	↓-10.0%	1,223
Private Sector	629	↑17.8%	741	↑24.4%	922	↑11.1%	1,024	↓-8.6%	935
Exhibitors	N/A*	N/A	369	↑24.1%	458	↑21.4%	556	↓-26.8%	407
Total	1,626	↑47.2%	2,394	↑9.3%	2,616	↑12.3%	2,938	↓-12.7%	2,565

*Includes the co-hosted Better Buildings Summit
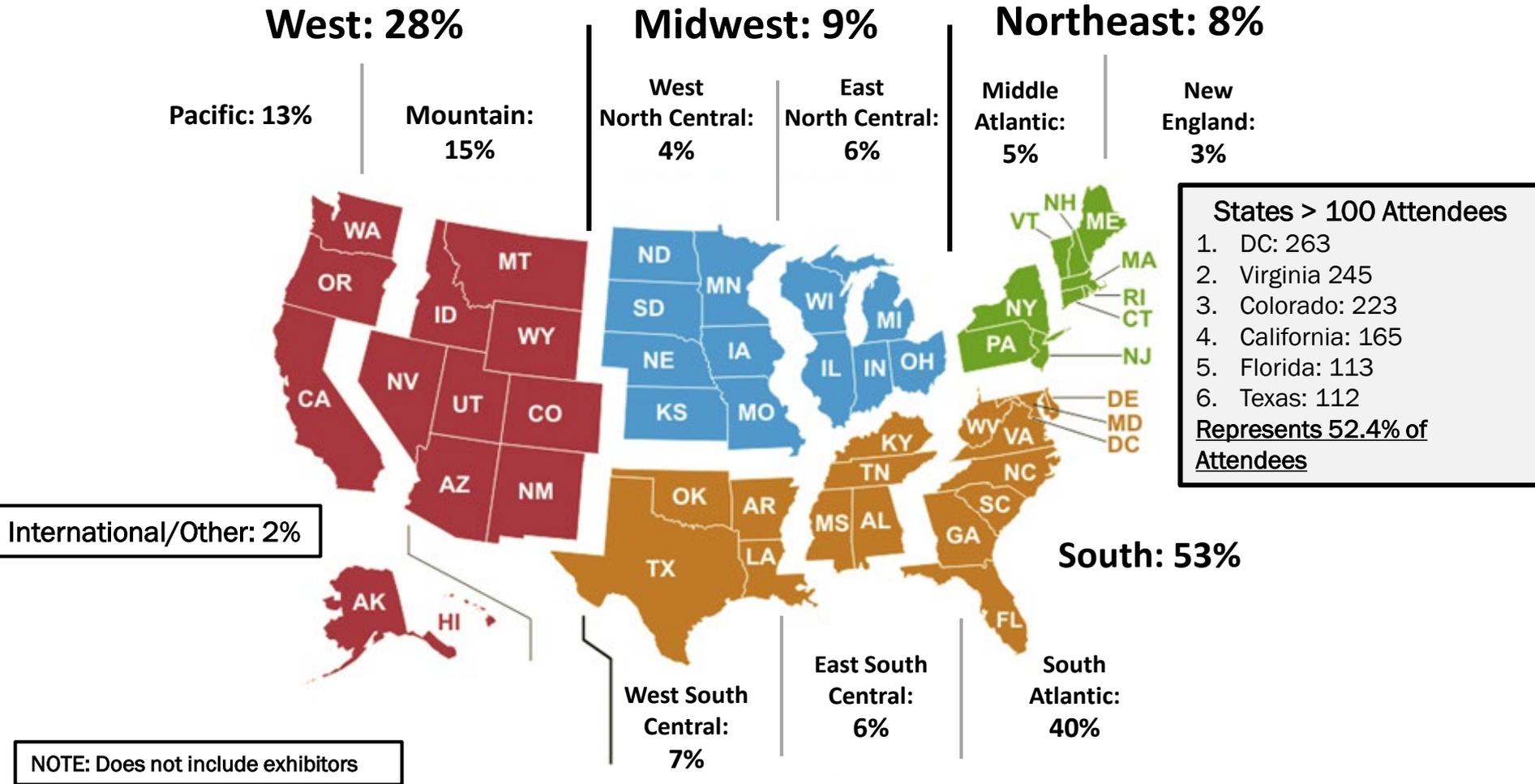
Agency Representation

Misc. includes:
- National Science Foundation (2)
- Nuclear Regulatory Commission (1)
- U.S. Postal Service (1)
- Library of Congress (1)
- Smithsonian Institute (1)
- Congressional Rep. (1)

*Logarithmic Scale

Registration by Location

West: 28%

Pacific: 13% Mountain: 15%

Midwest: 9%

West North Central: 4% East North Central: 6%

Northeast: 8%

Middle Atlantic: 5% New England: 3%

South: 53%

West South Central: 7% East South Central: 6% South Atlantic: 40%

International/Other: 2%

NOTE: Does not include exhibitors

States > 100 Attendees
1. DC: 263
2. Virginia 245
3. Colorado: 223
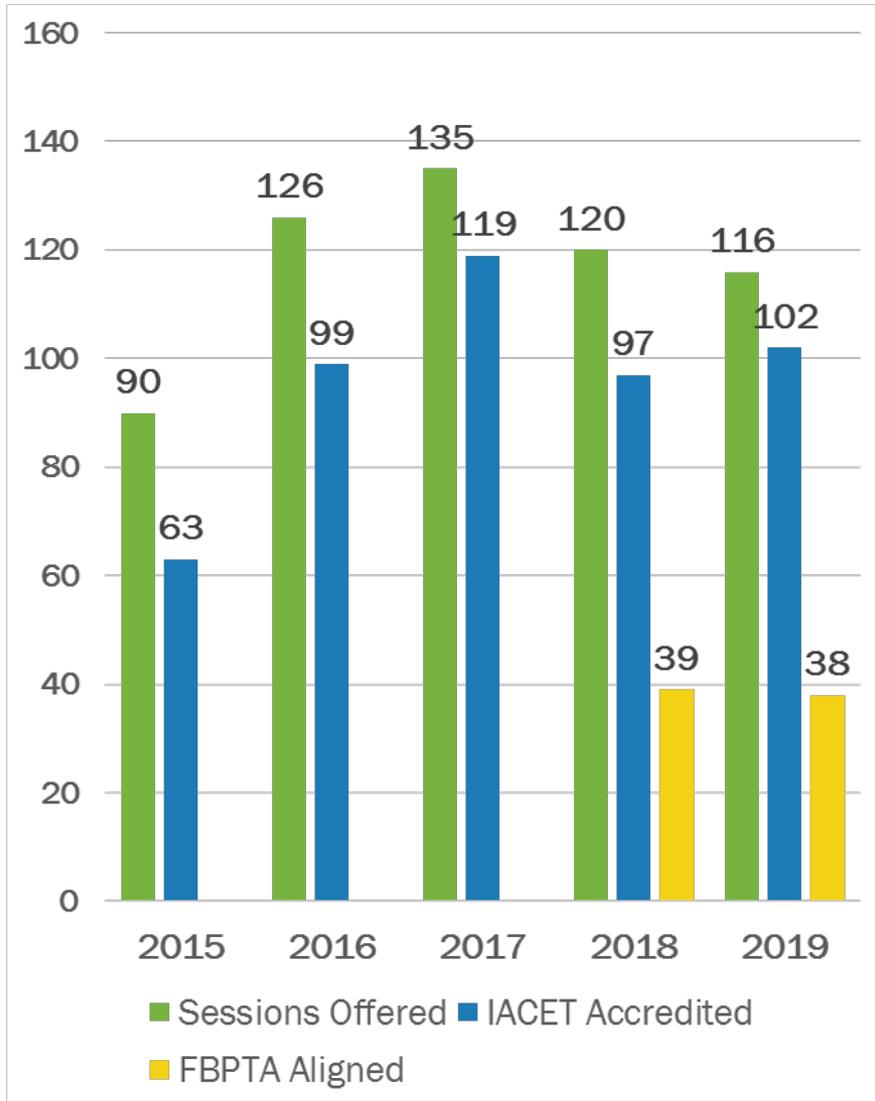4. California: 165
5. Florida: 113
6. Texas: 112

Represents 52.4% of Attendees

Registration by Job Function

Job Functions (Public Sector Registrants Only)
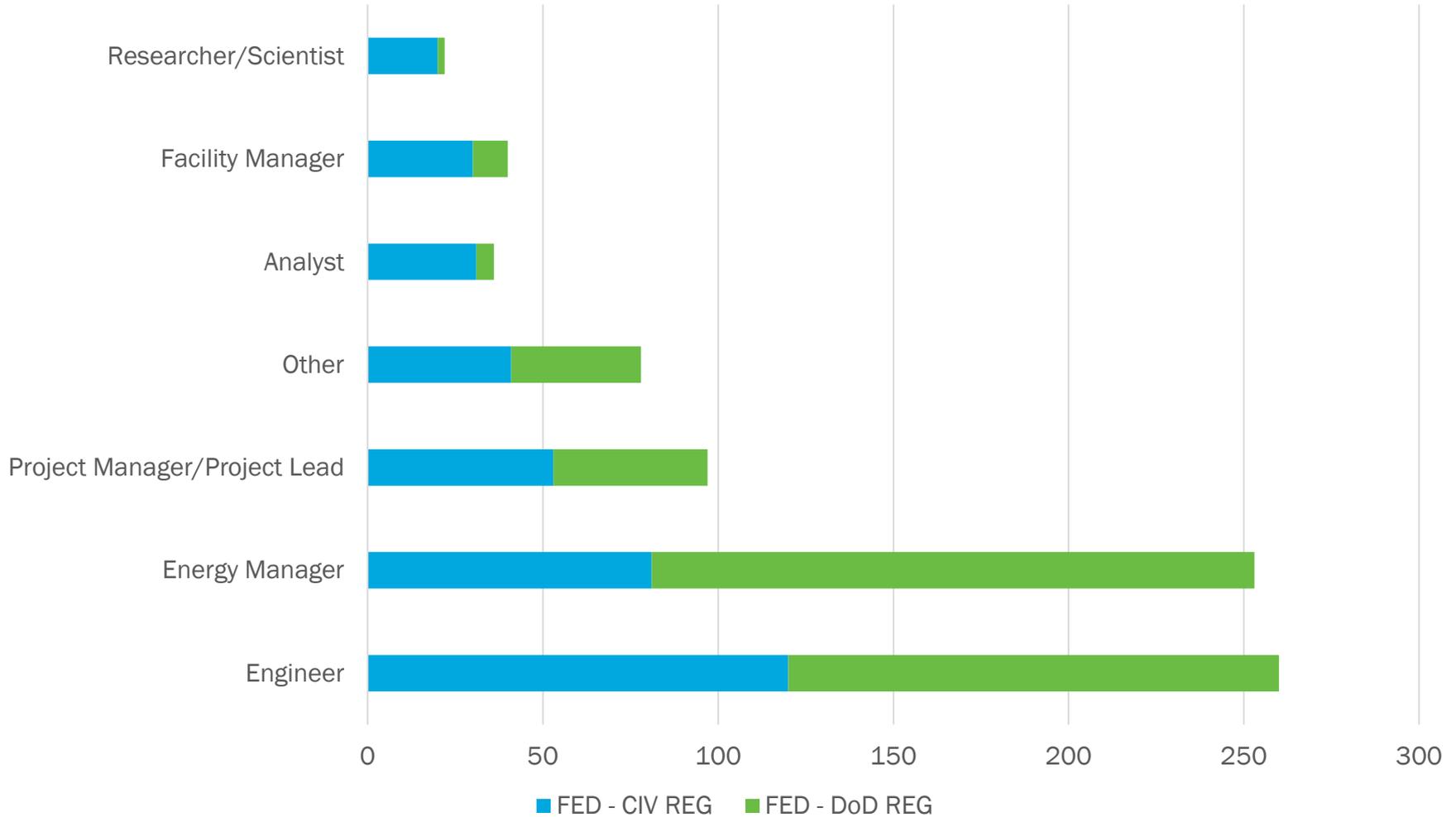
Technical Program History

Year	Technical Tracks	Sessions Offered	IACET Accredited	% Accredited	FBPTA Aligned
2015	10	90	63	70.0%	0
2016	14	126	99	78.6%	0
2017	15	135	119	88.2%	0
2018	14	120	97	80.8%	39
2019	13	116	102	87.9%	38

2019 Technical Training Program – 13 Tracks

Learning Objectives

Implementing Federal Policy & Direction

1. Policy and Strategies

> CEQ and OMB Perspectives
> Agency Leadership Roundtables

Integrating Resilience & Design for Agency Mission

2. Energy and Water Resilience Planning
3. Integrated Facility and Installation Design
4. Resilience Project Implementation

> Cost-Effective Technologies and Generation
> Integrated Design, Buildings and Technologies
> Energy Storage

Optimizing Building Management & Maintenance

5. Building Optimization Essentials
6. Advanced Analytics for Building Performance
7. Energy & Water Management

> Cost-Effective Operations and M&V
> Cybersecurity & Data Analytics
> Cost and Waste Reduction
> Auditing Requirements and Methodologies

Utilizing Effective, Efficient & Secure Technologies

8. Advanced Effective Technologies
9. Cybersecurity Technologies and Control Systems
10. Optimized Fleets

> Emerging Technologies
> Distributed Resources and Storage
> Cybersecurity Integration & Assessment
> Fleet

Leveraging Affordable Financing & Partnerships

11. Financing & Performance Contracting
12. Performance Assurance & Utility Partnership
13. Financing for Resilience

> Financing: Basics, Topics, and Trends
> Performance Assurance – Basics & Topics
> Utility Partnership & Trends
> Financing Resilience

Track Attendance

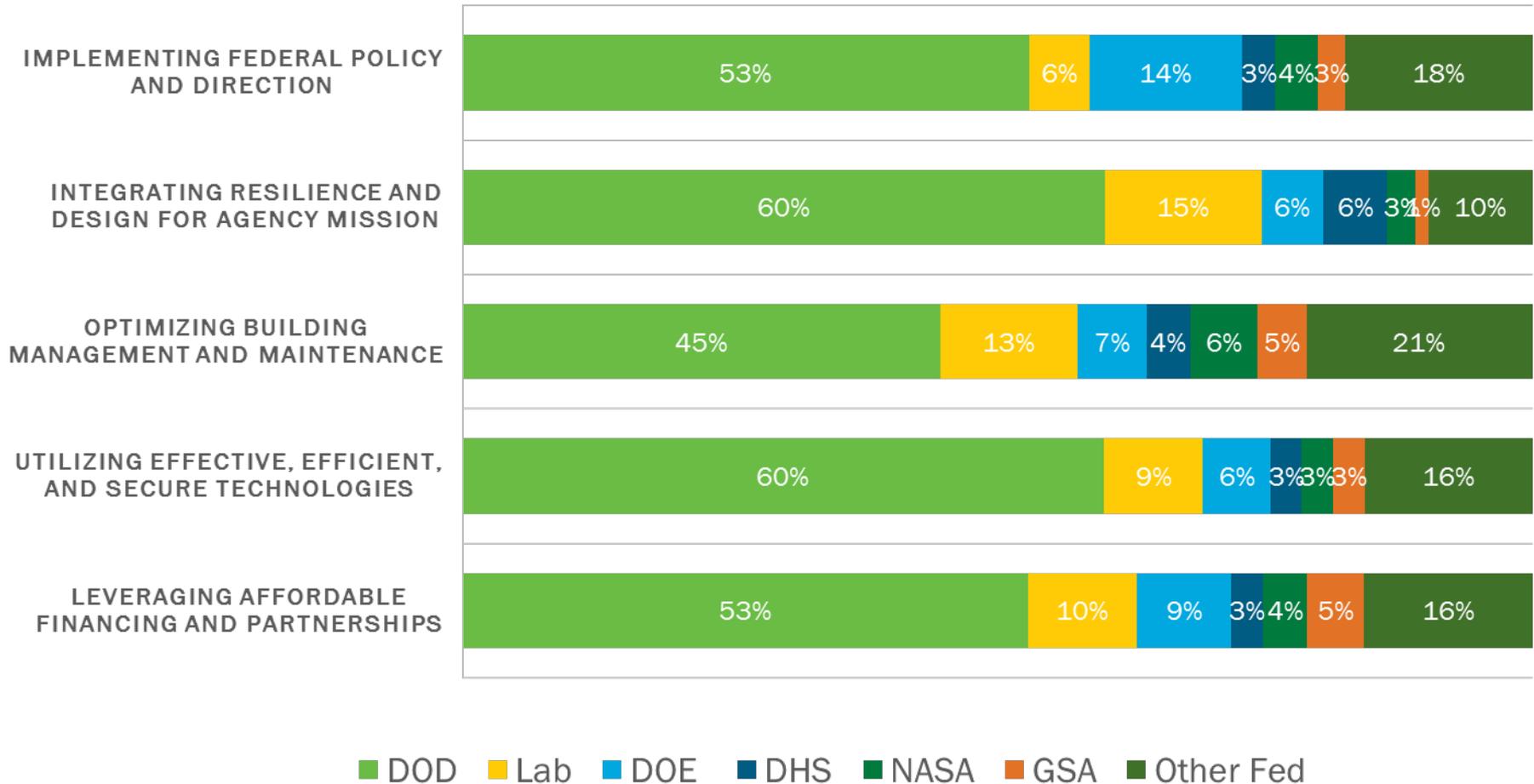| Track #	Track Title	Scans	Average Scans per Session
4	Resilience Project Implementation	1,468	163
2	Energy and Water Resilience Planning	1,232	137
1	Policies and Strategies	1,202	134
8	Advanced Effective Technologies	1,103	123
9	Cybersecurity Technologies and Control Systems	961	107
5	Building Optimization Essentials	928	103
7	Energy and Water Management	870	97
6	Advanced Analytics for Building Performance	827	92
11	Financing and Performance Contracting	778	86
3	Integrated Facility and Installation Design	763	85
13	Financing for Resilience	733	81
12	Performance Assurance and Utility Partnerships	518	58
10	Optimized Fleets	417	46

Who Went to Which Track

Job Functions > 200 Track Scans

Energy Managers and Engineers account for the highest percentage of session scans

Legend:
- Engineer
- Energy Manager
- Project Manager/Project Lead
- Consultant
- Vice President/Director/Executive
- Analyst
- Facility Manager
- Contracting Officer
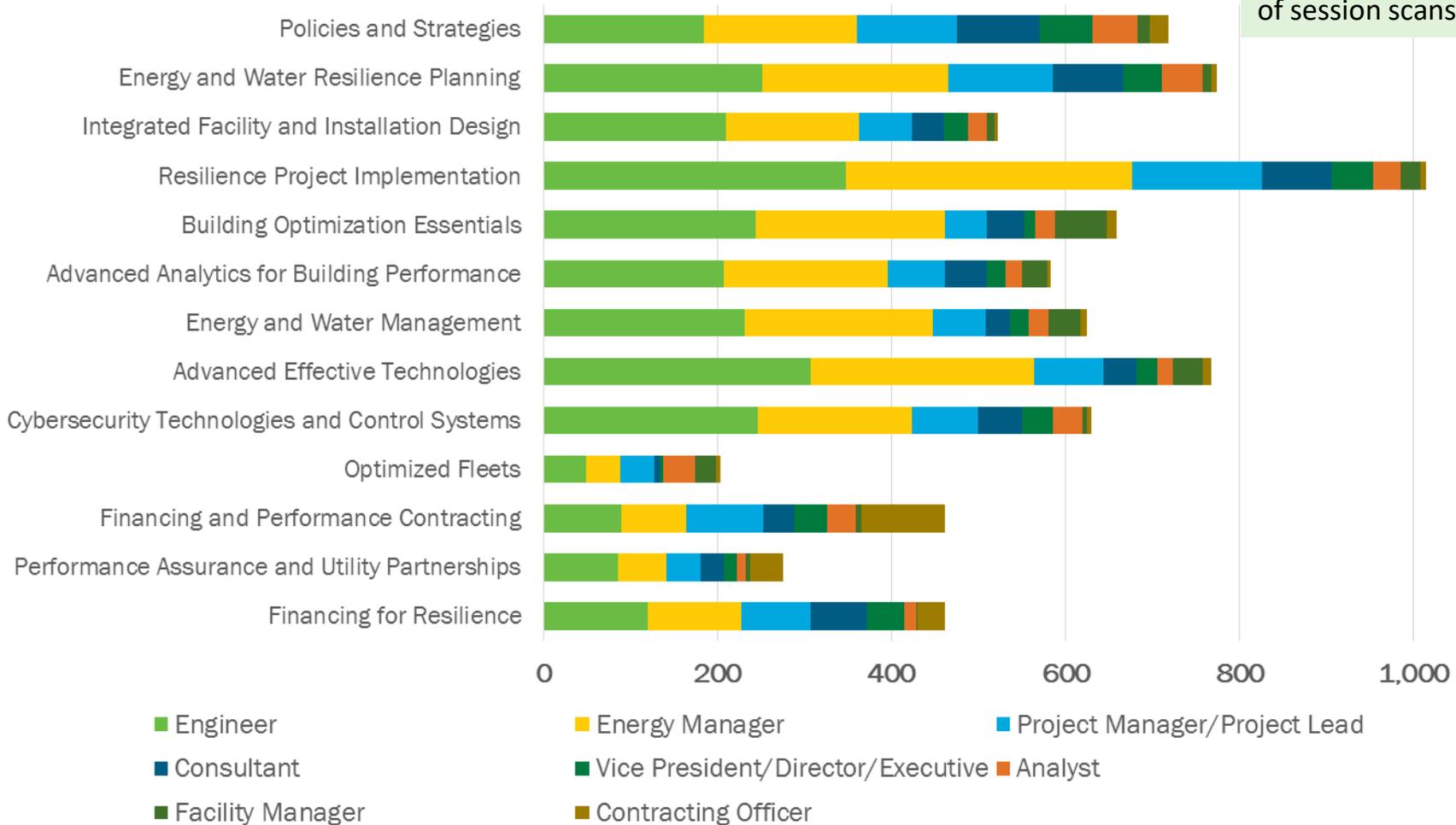
Federal Scans by Focus Areas

Focus Area	DOD	Lab	DOE	DHS	NASA	GSA	Other Fed
IMPLEMENTING FEDERAL POLICY AND DIRECTION	53%	6%	14%	3%	4%	3%	18%
INTEGRATING RESILIENCE AND DESIGN FOR AGENCY MISSION	60%	15%	6%	6%	3%	1%	10%
OPTIMIZING BUILDING MANAGEMENT AND MAINTENANCE	45%	13%	7%	4%	6%	5%	21%
UTILIZING EFFECTIVE, EFFICIENT, AND SECURE TECHNOLOGIES	60%	9%	6%	3%	3%	3%	16%
LEVERAGING AFFORDABLE FINANCING AND PARTNERSHIPS	53%	10%	9%	3%	4%	5%	16%

Legend: ■ DOD ■ Lab ■ DOE ■ DHS ■ NASA ■ GSA ■ Other Fed

Most Attended Sessions

Key findings:

- Technology-focused sessions, leadership panels, and resilience sessions remain highly attended

- Energy Managers and Engineers account for the highest percentage of session scans

- Session 1 = most attended session (1,567)
- Session 9 = least attended session (1,075)

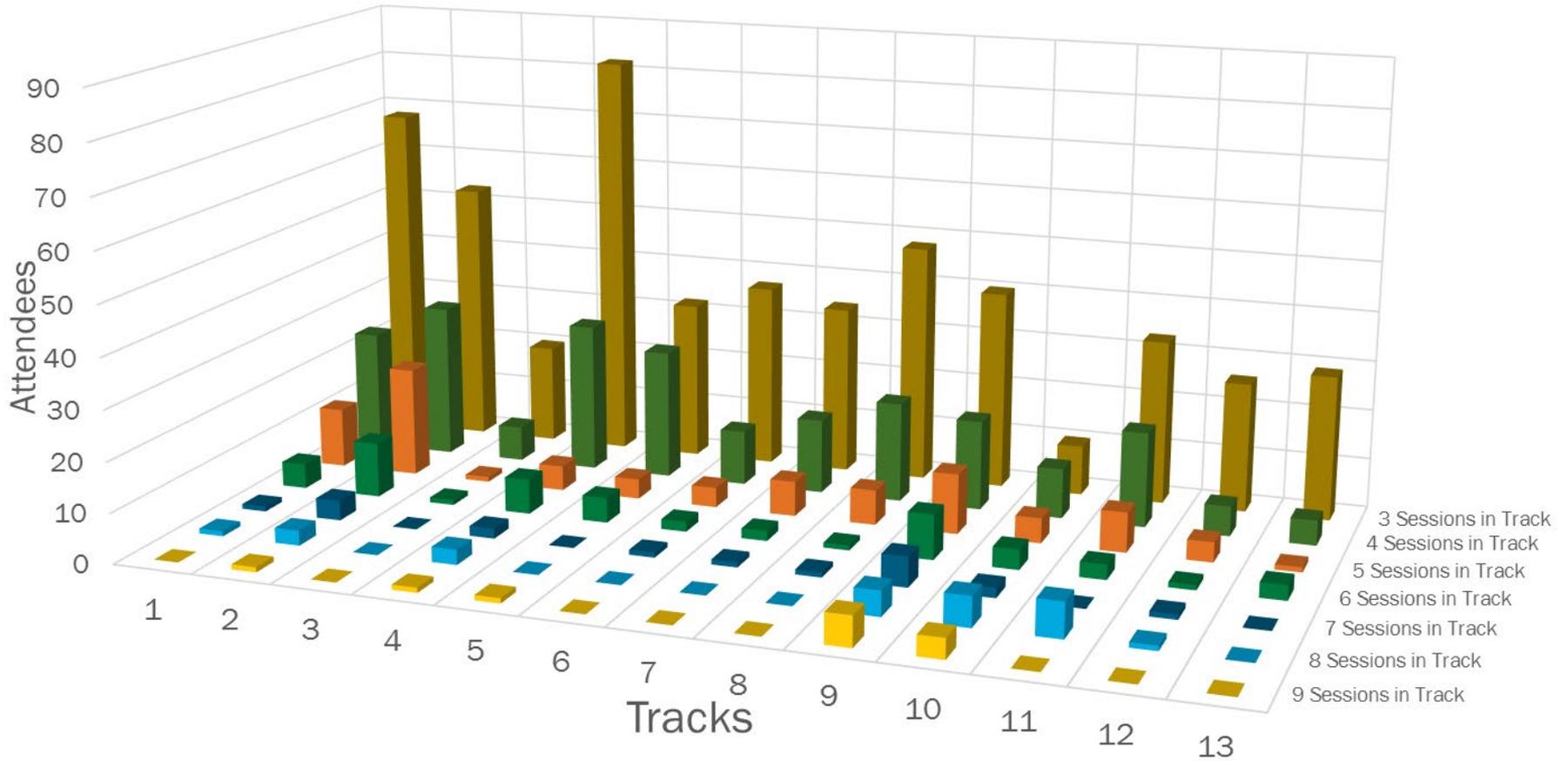| Most Attended Sessions			
Track	Session	Session Title	Scans
4	1	Microgrid Implementation	289
8	1	New Energy Storage Technologies	229
2	3	Defining and Aligning Critical Resilience Requirements	225
1	7	DoD Deputy Assistant Secretary Panel	217
1	5	White House Directives	197
8	2	Distributed Energy Technologies	195
2	1	Agency Resilience Framework Overview	193
4	3	Using Combined Heat and Power for Efficient Resilience	191
4	4	Integrating Renewables and Non-Renewables for Resilience	191
2	4	Assigning Value and Prioritizing Resilience Requirements	188

Most Attended Sessions – *by Civilian Agencies*

Section 2: Technical Program Analysis

Rank	Track	Session	Session Title	Civ Fed Attendees	Total Attendees	% DOD Attendees
#1	1	5	White House Directives	86	196 (#5)	44%
#2	8	1	New Energy Storage Technologies	68	229 (#2)	30%
#3	2	1	Agency Resilience Framework Overview	62	193 (#7)	32%
#4	1	4	Energy Legislation in Congress	61	168	36%
#5	7	3	Building Energy Management Systems	61	156	39%
#6	7	1	Energy and Water Assessments: Virtual and Conventional	53	130	41%
#7	1	8	Energy Innovation	51	166	31%
#8	2	2	Risk Management and Planning for All Hazards	50	137	36%
#9	5	6	Commissioning for New and Existing Buildings	50	126	40%
#10	7	5	O&M and Retuning for Energy Savings and Resilience	49	127	39%
#11	3	8	Smart Labs for Today's Energy Reality	46	71	65%
#12	8	4	Advanced HVAC Technologies	46	156	29%
#13	6	1	Enterprise Analytics: Leveraging the Data Dump	45	103	44%
#14	3	9	Effective Implementation of ASHRAE 90.1 2013 Requirements	44	109	40%
#15	5	2	Auditing 101	44	110	40%

Repeat Track Attendance

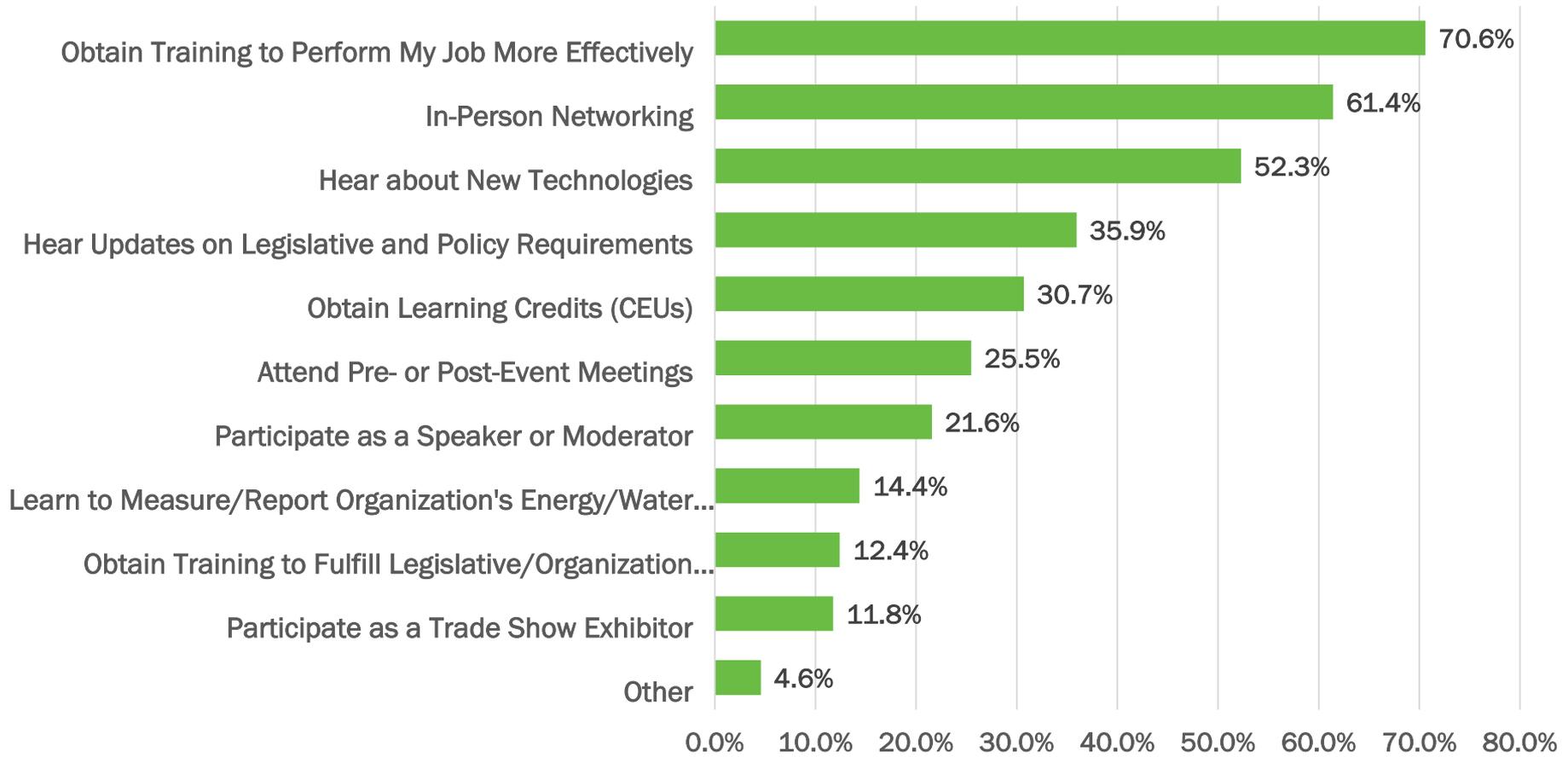| TRACK 1	TRACK 2	TRACK 3	TRACK 4	TRACK 5	TRACK 6	TRACK 7	TRACK 8	TRACK 9	TRACK 10	TRACK 11	TRACK 12	TRACK 13
Policies and Strategies	Resilience Planning	Integrated Facility and Installation Design	Resilience Project Imp.	Building Optimization Essentials	Advanced Analytics for Building Performance	Energy and Water Management	Advanced Effective Technologies	Cybersecurity Technologies and Control Systems	Optimized Fleets	Financing and Performance Contracting	Performance Assurance and Utility Partnerships	Financing for Resilience

Attendee Experience

- **93%** of survey responders were satisfied or very satisfied with the whole event experience, the highest rate since administering surveys

Historical Event Satisfaction

Year	Very Satisfied	Satisfied	Total
2016	43%	48%	91%
2017	41%	48%	89%
2018	44%	47%	91%
2019	51%	41%	93%

■ Very Satisfied ■ Satisfied

2019 Whole Event Experience: 51.3% / 41.3% / 6.7% / 0.7%

■ Very Satisfied ■ Satisfied ■ Neither Satisfied or Dissatisfied ■ Dissatisfied ■ Very Dissatisfied
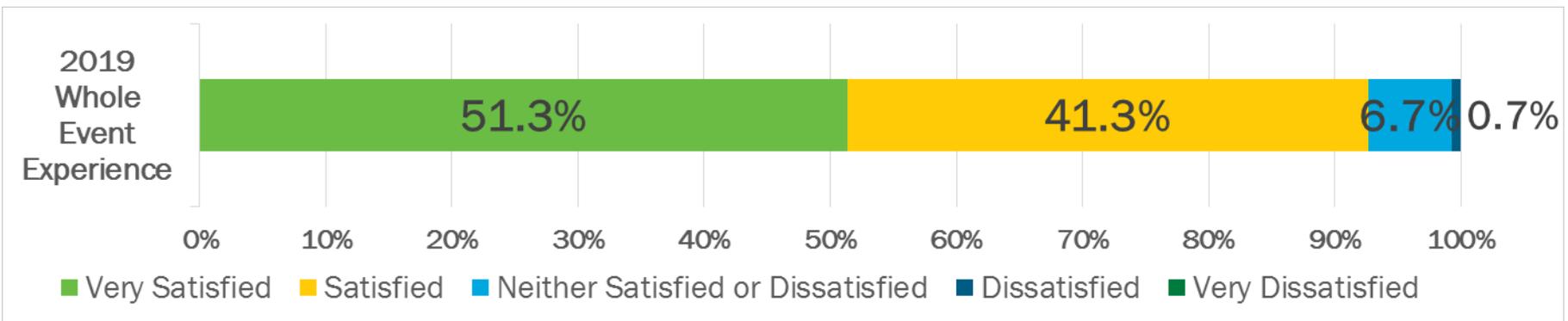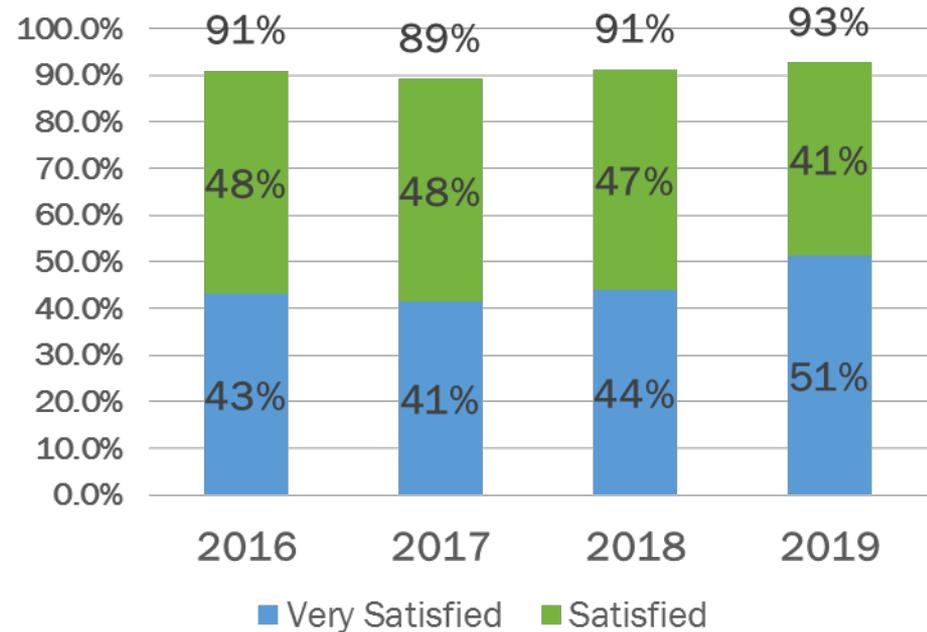
Main Reasons for Attending Energy Exchange

Reason	Percentage
Obtain Training to Perform My Job More Effectively	70.6%
In-Person Networking	61.4%
Hear about New Technologies	52.3%
Hear Updates on Legislative and Policy Requirements	35.9%
Obtain Learning Credits (CEUs)	30.7%
Attend Pre- or Post-Event Meetings	25.5%
Participate as a Speaker or Moderator	21.6%
Learn to Measure/Report Organization's Energy/Water...	14.4%
Obtain Training to Fulfill Legislative/Organization...	12.4%
Participate as a Trade Show Exhibitor	11.8%
Other	4.6%

Impact of Training
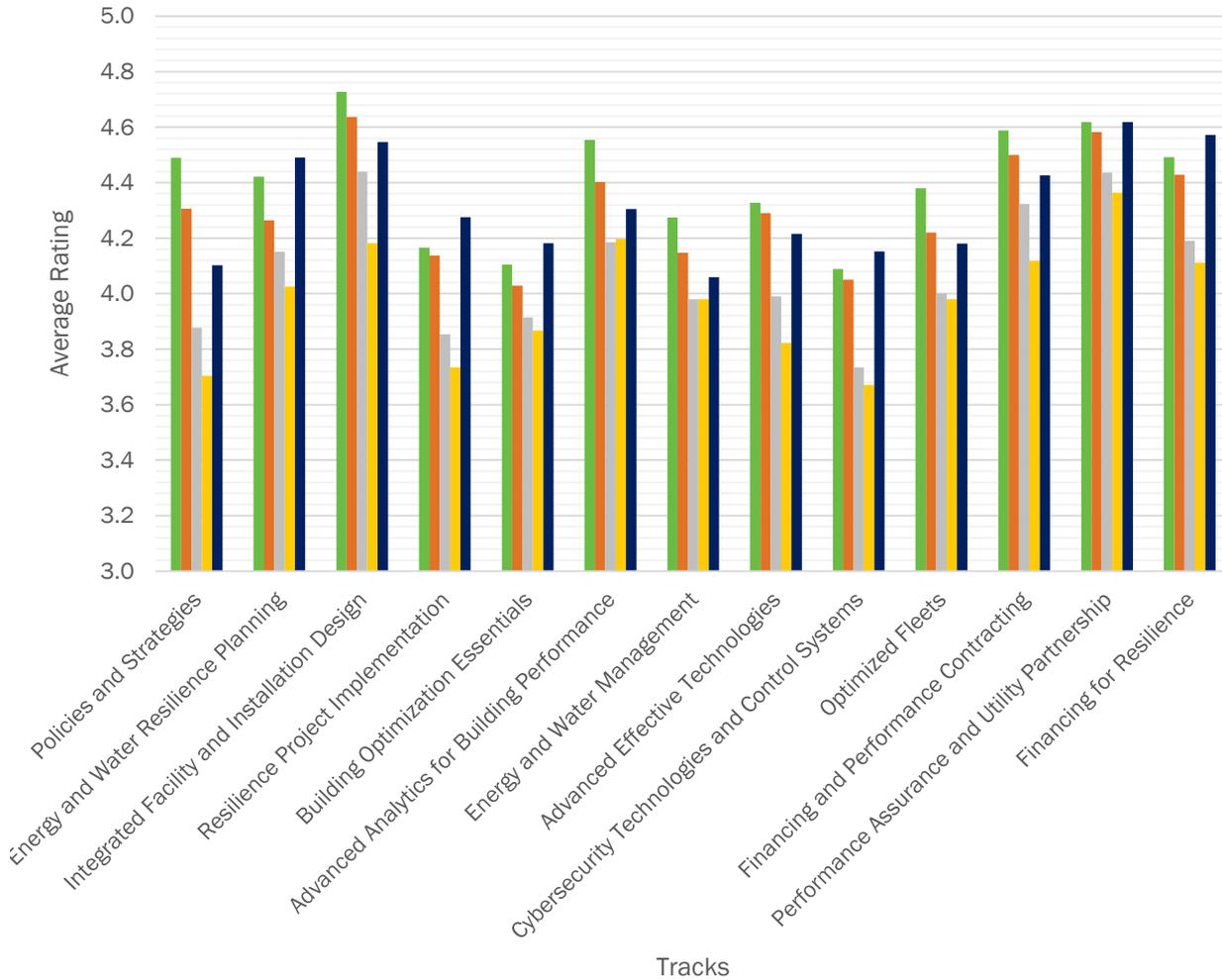
5 In-App Questions about each Session

- 1. Overall, the material in this session was well-presented.

- 2. This session was highly informative.

- 3. What I learned in this session will help me perform my job better.

- 4. Implementing the information presented in this session will help produce measurable results in my organization.

- 5. The topic of this session is of growing importance for my job.

Energy Exchange 2020

Atlanta, GA

GA World
Congress Center

August 11-13

Civilian Agency Participation Facilitation

What to think about? How can FEMP enhance the value proposition for individuals and agency leadership to ensure they can attend this training event?

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Have Questions/Comments/Need Assistance?
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