

THE
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National Energy Management Institute (NEMI)

Lisa Davis
Fund Administrator - NEMI



Maximizing Work Opportunities in IAQ, TAB and More

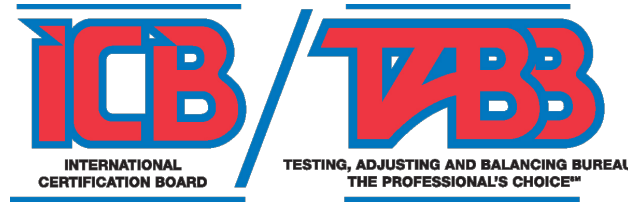
with NEMI's Help



National Energy Management Institute (NEMI) exists to make buildings safe and keep them healthy, while improving energy efficiency.

What do we do:

- **Define Market Opportunities**
- **Participate in Developing Codes and Standards**
- **Develop Industry Recognized Certifications**
- **Provide Resources to Support Implementation**



- Code/Standard Development
- Legislative Support
- Subject Matter Experts (SME)
- Construction Technology
- Research
- Implementation

- Certification

- Database to support Mechanical Acceptance Testing



**Executive Director
ITI/NEMI/SMOHIT
Dan McCallum
DMcCallum@sheetmetal-iti.org
484-620-5902**



NATIONAL ENERGY MANAGEMENT INSTITUTE

Regional Field Representatives

**NEMI Administrator
Lisa Davis
503-866-7657
LDavis@nemionline.org**

**Northeast Region
Jeremy Zeedyk
JZeedyk@nemionline.org
860-209-4324**

Midwest Region

**ICB/TABB
Certification Information:
Director of Certification:
Cassandra Kline
CKline@icbcertified.org
419-388-5933**

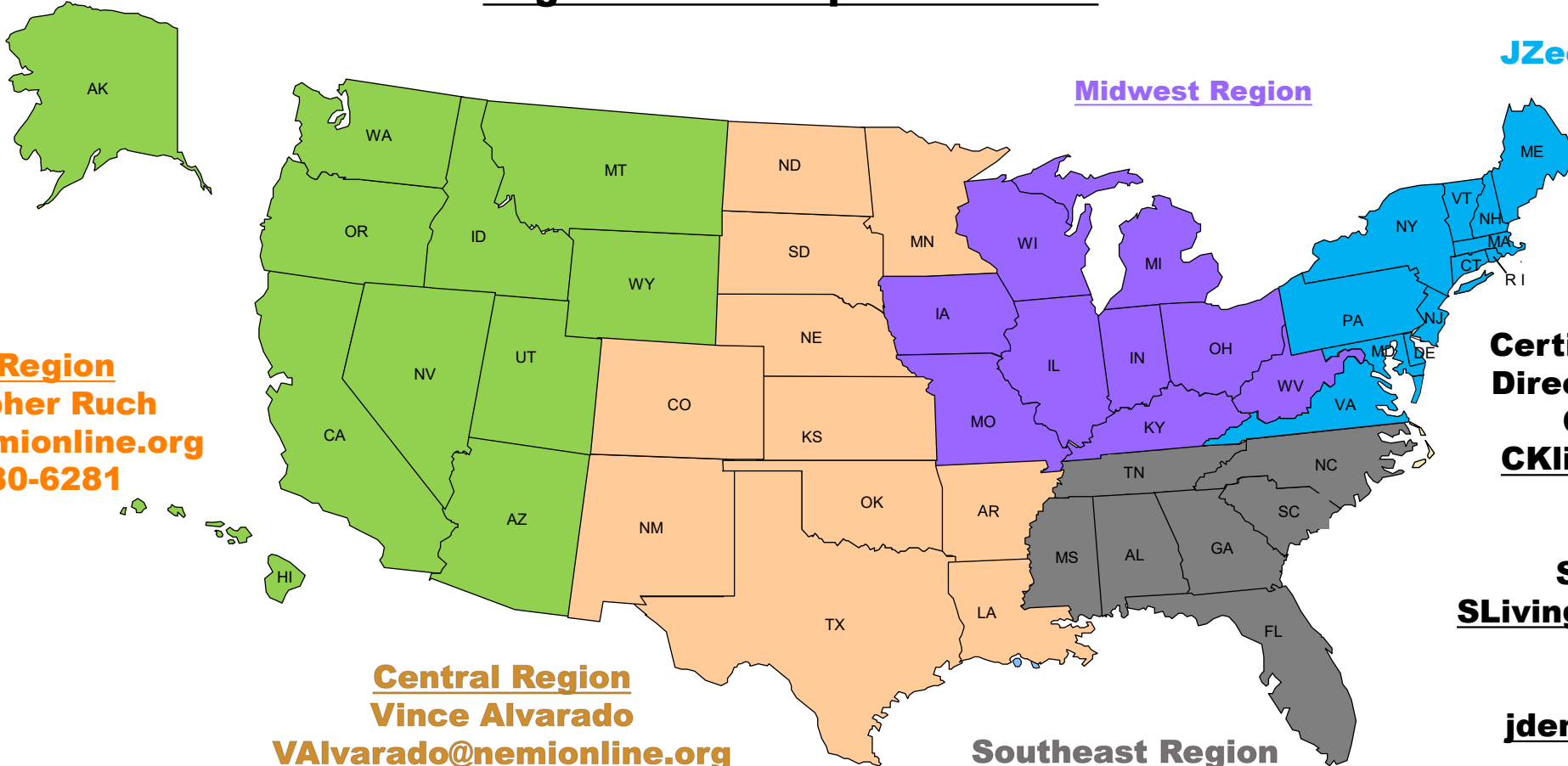
**Sheila Livingston
SLivingston@icbcertified.org**

**Joel Dema
jdema@icbcertified.org**

**Southeast Region
Josh Hunter
JHunter@nemionline.org
205-529-3404**

**Central Region
Vince Alvarado
VALvarado@nemionline.org
915-996-7059**

**West Region
Christopher Ruch
CRuch@nemionline.org
916-280-6281**



Define Market Opportunities

Participate in Developing Codes and Standards



Market Opportunities

IAQ – Ventilation Verification

- Senior Living Centers
- Wildfire Smoke
- ASHRAE 241

Fire Life Safety

- Duct Cleaning
- Kitchen Hood Ventilation



Engaging with Academic Partners

- UC Davis
 - Exploring TAB Certs Comparison
 - VV-IAQ White Papers



UCDAVIS

Western Cooling Efficiency Center

Part of the Energy and Efficiency Institute

- University of Toronto &
- Toronto Metropolitan University
 - Return Duct vs. Open Plenum
 - TC 5.2 White Paper



Civil & Mineral Engineering

UNIVERSITY OF TORONTO

**Toronto
Metropolitan
University**

- ASHRAE Research Topic Acceptance Request (RTAR)



Plenum Return

Why are they used?

- Energy?
- Do they actually save energy?

Infiltration?

Airflow distribution?

Above ceiling exposures?



Participate in Codes and Standards

- National Fire Protection Agency (NFPA)
- International Association of Plumbing and Mechanical Officials (IAPMO)
 - Uniform Mechanical Code (UMC)
- International Code Council (ICC)
- ASHRAE



TABB Adoption in VA and GSA Specifications

U.S. Department of Veterans Affairs (VA)

TABB has been added to VA specification Section 23 05 93, TESTING, ADJUSTING AND BALANCING FOR HVAC

U.S. General Services Administration (GSA)

5.3.2.14 TESTING, ADJUSTING, AND BALANCING
Testing, Adjusting, and Balancing Bureau (TABB) has been added!

Stakeholder Awareness Training & Resource Promotion:

- Fire Marshals
- Fire Departments
- Inspectors
- Engineers
- Legislators

NEMI can help share and create materials and other resources based on proven best practices

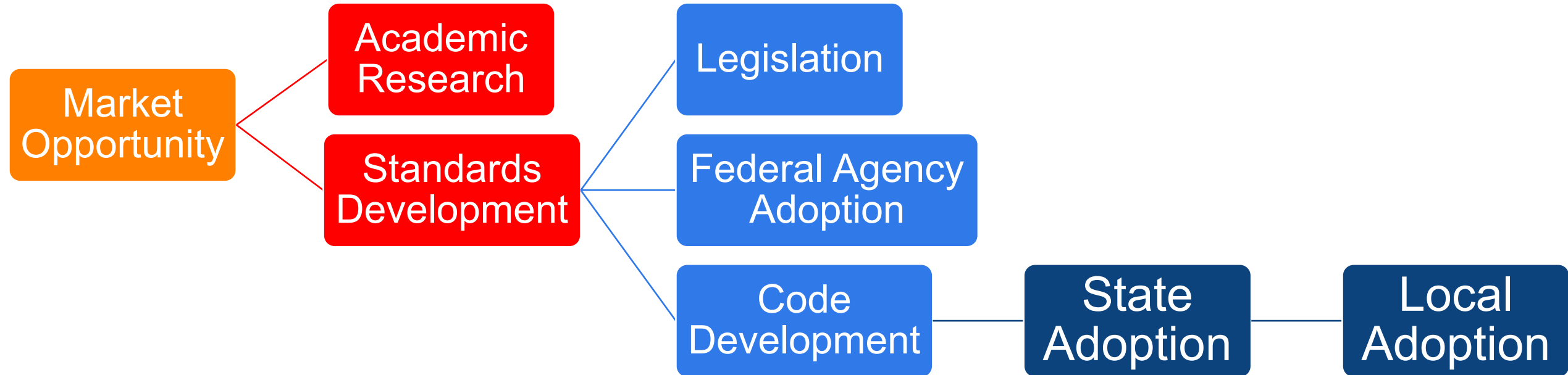


Subject Matter Experts to Support Your Legislative Efforts

- Testimony
- Sample Language
- Sample Grant Language

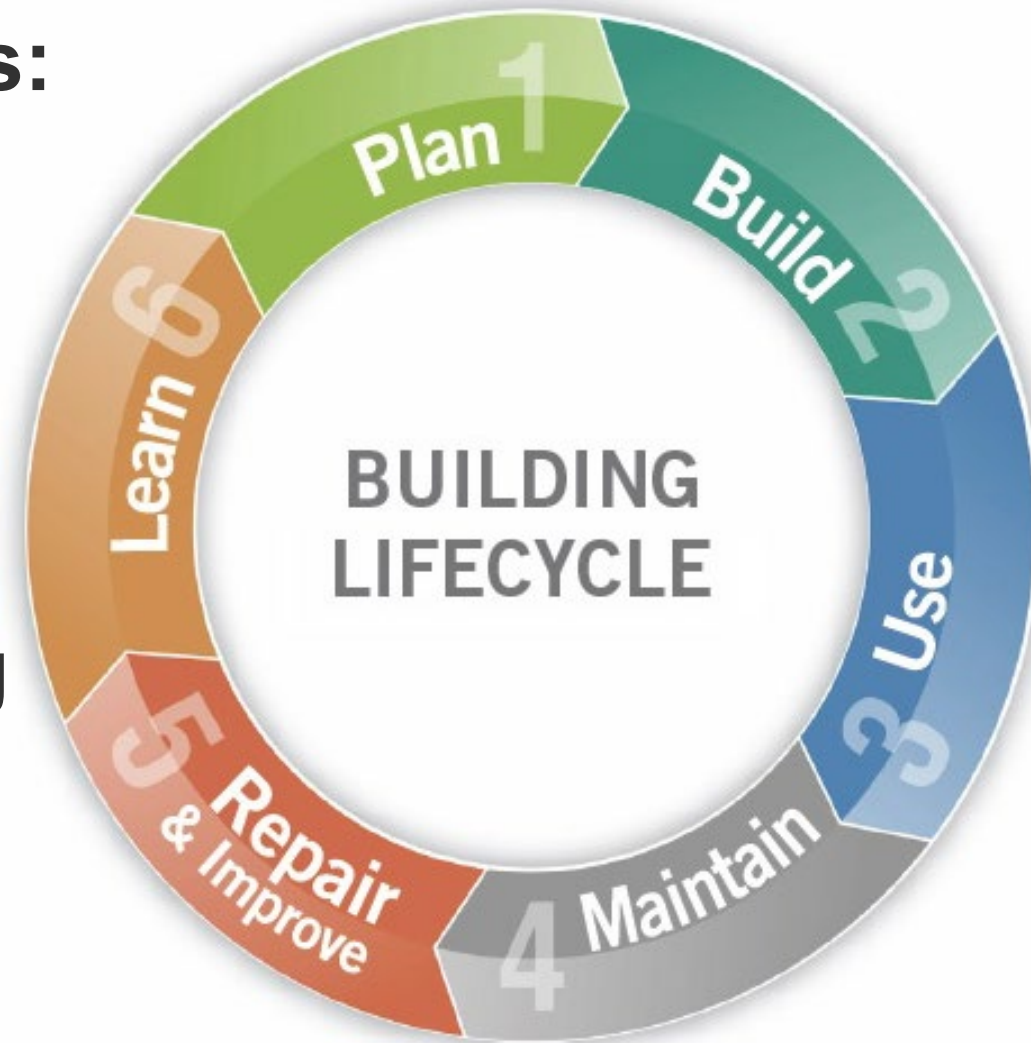


Implementation of Market Opportunities



“Design to Demo”

- **Maintain a presence in all buildings:**
- Ventilation Verification
- Mechanical Acceptance Testing
- Fire Smoke Damper (FSD) Testing
- Smoke Control System (SCS) Testing
- Duct Cleaning
- Kitchen Hood Ventilation



Develop Industry Recognized Certifications



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International Certification Board (ICB) Certifications:



- Testing, Adjusting & Balancing
- Fire & Smoke Damper
- Smoke Control Systems
- Ventilation Verification for Indoor Air Quality
- Mechanical Acceptance Testing (for the California Energy Commission Title 24 Regulation)
- & More...



ANSI National Accreditation Board

A C C R E D I T E D

ISO/IEC 17024

**PERSONNEL CERTIFICATION
BODY**

TABB Exam Review/Revision

- TABB Technician and Supervisor Certification written exams are currently under review
 - SMEs are updating the:
 - Job Scope/Task Analysis,
 - Guiding Documents
 - Items (questions) on the exams
- Goal of Summer 2024 for release!



TABB Facility Minimum Design Criteria

ICB & ITI worked to create design criteria document, which includes:

- Min criteria for testing
- Additional features for training

Contact us for a copy and a follow-up with ideas!



Fairview Park Drive, Suite 400 • Falls Church, Virginia 22042

TABB Facility Minimum Design Criteria

NEMIC / ITI - TAB Facility Design Concept Minimum Requirements for an Authorized TABB Practical Testing Facility

Introduction

This design concept features a sample Testing, Adjusting, and Balancing (TAB) Facility to be used as a guide for facilities that either already have, or want to build, an Authorized TABB Performance Testing Facility. The laboratory mechanical system is designed to include all major components of a typical HVAC system.

Section 1 This section represents the minimum systems and components necessary to successfully conduct a TABB performance exam test at a facility.

Section 2 The intent of this section is to provide examples of additional training scenarios that go beyond the minimum requirements of section 1. All the examples listed shall meet the minimum requirements of section 1.

Building Description

The laboratory concept is based on a nominal 30' x 30' area. The mechanical

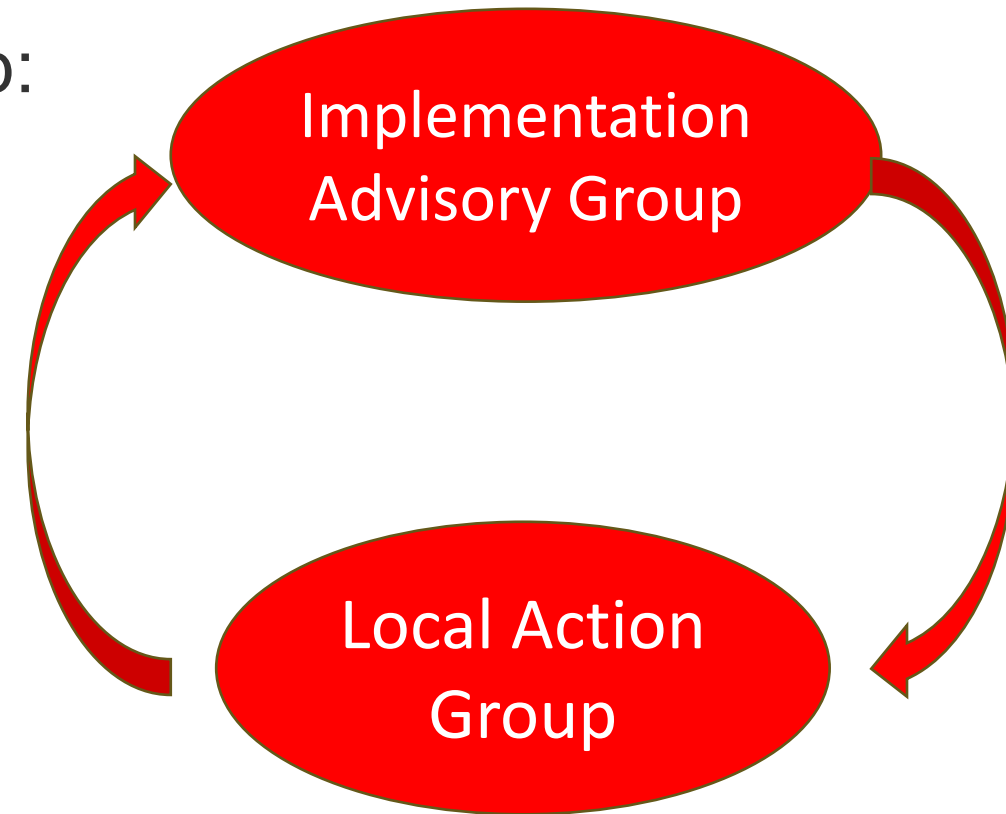
Provide Resources to Support Implementation



Implementation, Education & Awareness Meetings

Creating an Implementation Advisory Group

- Things to consider when forming the group:
 - Market Opportunity
 - Agenda
 - Develop a strategic plan!
 - Point Person (Critical)
 - Requesting Regional/ Local Participation
 - Conducting meetings
 - Action Items



Resources to Support Implementation

- NEMI Website Resources
 - Sample Test Sheets
 - Method of Procedures (MOP)
 - Educational Videos
 - Research Papers
 - Online training



Case Study – Philadelphia Fire Life Safety

- Unanimously passed City Council in January 2019
- FLS inspections kept many contractors in business during COVID-19 shutdown
- Currently have over 35 contractors performing this work



Case Study – Nevada Fire Life Safety

- Passed AB 297
- State Fire Marshal asked us to enter into Nevada Administrative Code
 - FSD, SCS, Kitchen Ventilation
- Advancing Training Capabilities
- Las Vegas Fire Smoke Damper (FSD) and Smoke Control System (SCS) Training



Case Study – California CalSHAPE – Ventilation Verification

Program budget is now **\$994 million**

75% for the ventilation program and
25% for the plumbing program

- \$550 million has been requested.
- \$444 million is remaining.

Reported Hours:

- Survey of 4% of CAL SMACNA Contractors representing all regions of California
 - **135,787 Hours**



Case Study – Connecticut SB 423 – Ventilation Verification

Ventilation Verification Periodic Inspection

- IAQ survey completed by 2024 and repeated every 5 Years thereafter
- All Public Schools required by 2026

Funding

- Currently as part of School Construction Bonding Program
 - Allocated in 2022 - **\$150 Million**
 - Allocated in 2023 - **\$375 Million**



Case Study – Oregon HB3031 & Grant Program - Ventilation Verification

Legislation Ventilation Verification Periodic Inspection

- Initial assessment and then every 5 Years

Grant Writer (NWRC)

- NWRC provided budget for grant writing
- Access to Federal Funding

Results

- 57 School Districts willing to Sign PLAs
- 33 Schools Districts selected = estimated \$825 Million in HVAC Infrastructure repairs and replacements



Industry Partnerships

- Evergreen Telemetry:
 - 20% Discount on TABB and IAQ Kits for ICB-Certified Contractors
 - 2-day Calibration Guarantee
- Testo Instrumentation:
 - 20% Discount on TABB and IAQ Kits for ICB-Certified Contractors



2024 ICB & TABB Conference

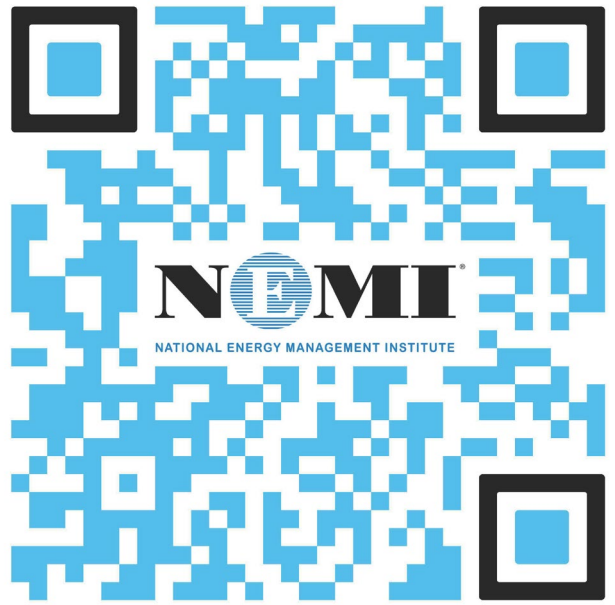
April 29, 2024 – May 2, 2024

St. Louis,
Missouri

Local 36 JATC



Social Media – Please Follow:



NEMI Website -

<https://www.nemionline.org/>



ICB Website -

<https://www.icbcertified.org/>



Questions, Answers, and Open Discussion



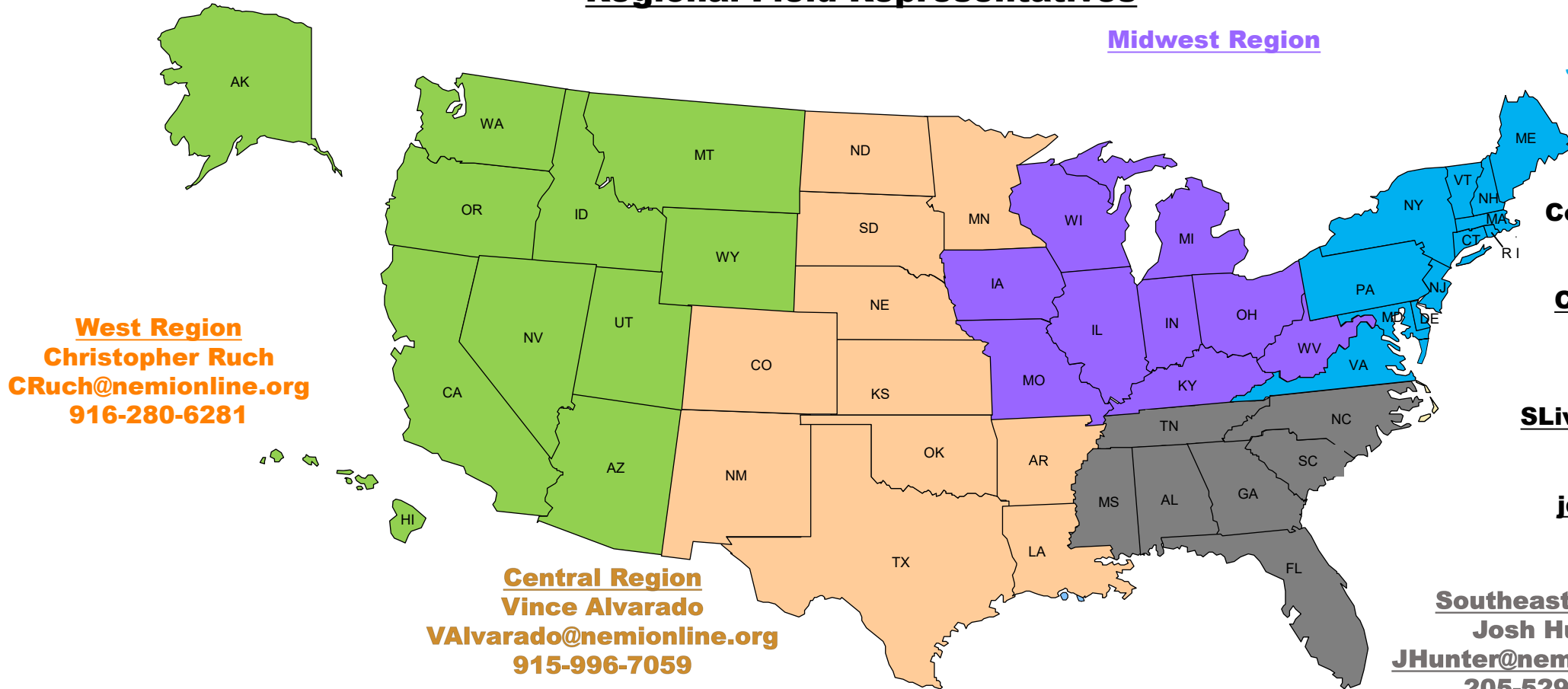
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Christopher Ruch
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**Please Remember
to Fill Out Your
Breakout Survey
on the App**

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