

Elizabeth Melville
SAE Director of Learning

5+ years with SAE International

Over 20 years in certification, training, and workforce development



### **PRE-PROFESSIONAL DEVELOPMENT**

A full continuum of preK-16 STEM outreach programing servicing over 75,000 students every year.

### **PROFESSIONAL DEVELOPMENT**

400+ course portfolio delivered through eLearning online and classroom courses on an individual and corporate level



### **ENGINEERING EVENT**

Over 30 global technical events annually for the aerospace, automotive, and commercial vehicle sectors



### **MEMBERSHIP**

Over 137,000 members worldwide collaborating whileusing multiple exclusivebenefits to advance personally and professionally





## **PUBLICATIONS**

100.000+ collection of technical publications



Magazines, eNewsleters. custom publishing, Tech Briefs Media Group



# **TECHNICAL STANDARDS**

35.000+ aerospace and ground vehicle standards



### **FOUNDATION**

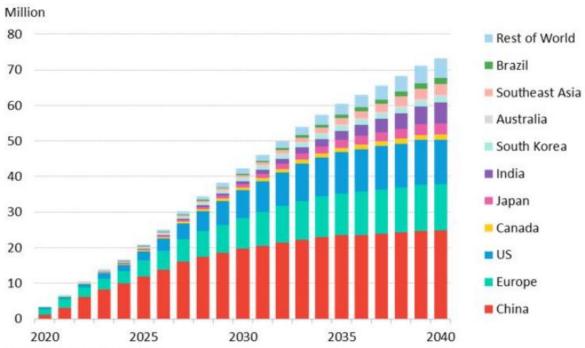
Inspiring Curiosity in STEM. Helping students succeed, educators excel and corporations meet their workforce, business and social responsibility goals by supporting the only Pre-K -College continuum of STEM education.



# Challenges to EV Adoption



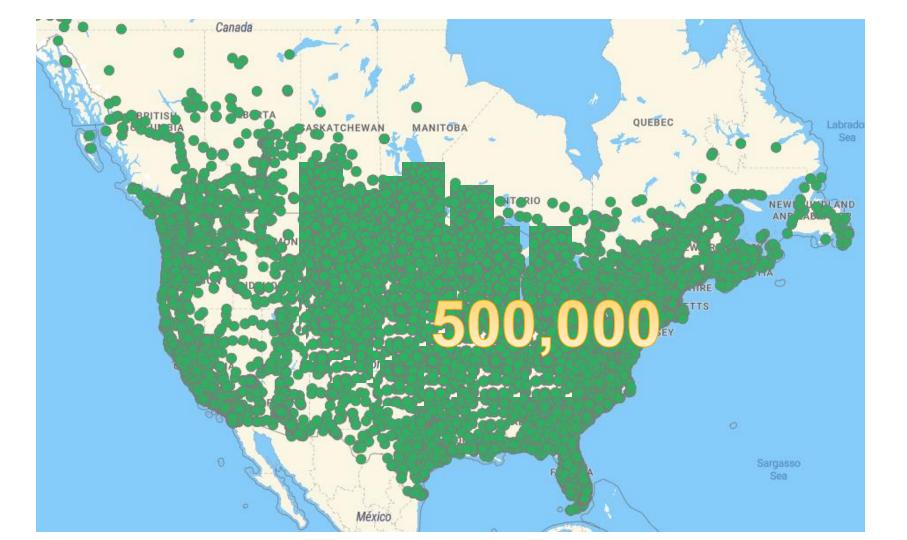
# **EV** Growth



Source: BloombergNEF.

Note: Europe includes the EU, the UK and European Free Trade Association (EFTA) countries. EV includes battery EVs and plug-in hybrid EVs.







130,000 Public Stations

78% Reliability

1 in 5 Inoperable

# **EV Charging Supply Equipment Technician Role**

Mobility, Advanced™

The EVSE Technician repairs, maintains and troubleshoots the hardware, software and firmware of the charging station.

Calibration

Commissioning

Communications

**Cell signal testing** 

**Corrective Maintenance** 

**Preventative** 

**Maintenance** 

**Diagnostics** 

**Parts Replacement** 

Reprogramming

**Troubleshooting** 

Install Upgrades

Technician Qualifications: Technical aptitude and basic mechanical skills, critical thinking skills, good communication. Trained at a private or public training provider or employer. No college degree required.













# **Professional Certification**

- Is aligned to specific, measurable criteria, including but not limited to professional experience, education, knowledge, skills and or competencies for a specific job function or set of functions
- Is validated by a neutral committee of experts and employers within the job field
- Is measured/verified through proctored examinations
- Awards a credential certifying candidate meets the certification requirements

# Value Chain

# For Employers

- Creates consistency in training
- Makes hiring easier
- Creates clarity in the industry regarding qualifications
- Harmonizes expectations across industry

# For Technicians

- Creates consistency in training
- Makes hiring easier
- Creates clarity in the industry regarding qualifications
- Harmonizes expectations across industry

# **EVSE Certification Overview**

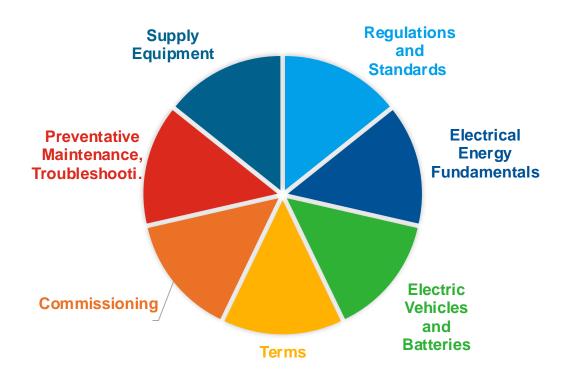
Mobility, Advanced™

- Body of Knowledge defines the knowledge and skills required for the EVSE Technician Role
- Outlines requirements for pre-requisite training
- Delivers an Examination to ascertain mastery of the BOK
- Maintains a Registry of certified individuals
- Maintains up-to-date knowledge and skills inventory





# **Body of Knowledge**



# Facilitate the workforce development of EVSE Field Technicians

- Guidance for
  - Training providers who wish to develop training courses intended for EVSE Field Technicians
  - Prep for EVSE certification examination

# **Levels of Certification**

Mobility, Advanced™

## **EVSE Generalist**

Technicians certified in all knowledge components related to servicing Level 1 - 3 charging.

# **EVSE Specialist**

Technicians certified in both the knowledge and skill components related to servicing Level 1 - 3 charging stations. EVSE Specialist are required to complete the knowledge & simulation-based exam to verify skills across all domains.

Note: EV Supply Equipment technicians are not qualified for installation. Local regulations stipulate who is qualified to conduct this work, but typically it is a licensed electrician. EVITP is the training and certification provider for installers.

# Pathway to Certification

Mobility, Advanced™

### **Training Providers** 350 Deschutes **AURA Complete training** Pass hands-on portion ChargerHelp! of exam at with an Charge-On authorized provider Cyber-Zen Dekra **Training** Exam: Part 2 DiverseNote Wake Tech Women Who Charge and a growing list of providers **OEM** Certifications Generalist **Specialist Certification** Certification Issued Exam: Part 1 Pass written portion of exam at authorized testing

centers

# **Next Steps**

Mobility, Advanced™

# **Training Providers**

Download the Body of Knowledge

Contact <u>Elizabeth.Melville@sae.org</u> to be included on the training provider list

# **Candidates**

Register for the exam here:

https://www.pearsonvue.com/us/en/sae.html

https://www.sae.org



# **North America**

Pittsburgh Detroit Washington, DC Silicon Valley

### Europe

Amsterdam London

Asia

Shanghai

