

Electric Vehicle and Infrastructure Codes and Standards Chart

Many standards development organizations (SDOs) are working to develop codes and standards needed for the utilization of alternative fuel vehicle technologies. This chart shows the SDOs responsible for leading the support and development of key codes and standards for electric.

Vehicles

CONTROLLING AUTHORITIES: DOT/NHTS

Light Vehicle Exterior Sound Level



Standards

Light Duty Vehicle Performance and

SAE

Economy Measure

Truck and Bus Hybrid and Electric Vehicle

Truck and Bus Alternative Fuels

Fuel Systems Standards

Hybrid Standards

Fuel Cell Standards

Storage Battery Standards

Engine Power Standards

SAE

Dispensing

CONTROLLING AUTHORITIES:

Local Building and Fire Departments

Vehicle and Charger Interface



Institute of Electrical and Electronics Engineers, Inc.



National Fire Protection Association



Society of Automotive Engineers

Vehicle Charging Stations



National Fire Protection Association

Charging Station Components



Underwriters Laboratory

General Construction Requirements



International Code Council

Infrastructure

CONTROLLING AUTHORITIES:

State and Federal Energy Regulatory Commissions

Power Plant Construction and Operation



FERC Federal Energy **Regulatory Commission**

Grid Operations Standards

National Institute of Standards and Technology

Power Plant Construction and Operation

NERC



NARUC National Association of Regulatory **Utility Commissioners**

Grid Operations



North American Electric Reliability Council



Key for Standards Development Organizations (SDOs)

This key provides the acronyms, names, and standards development areas that correspond with the standards development organization logos in the chart above.

Organization Name			Standards Development Areas
AGA	AGA	American Gas Association	Materials testing standards
energy	API	American Petroleum Institute	Equipment standards for petroleum production, storage and handling
H P	ASHRAE	American Society of Heating, Refrigerating, and Air-Conditioning Engineers	Promoting sustainability through research, standards writing, publishing, and education
ASME	ASME	American Society of Mechanical Engineers	Mechanical and multidisciplinary engineering, design codes and standards
457	ASTM	American Society for Testing and Materials	Technical test standards for materials, products, systems
6	CGA	Compressed Gas Association	Equipment design and performance standards for compressed gas systems and components
STANDARDS	CSA	CSA Standards	US and Canadian equipment standards
(2)	DOT	Department of Transportation	Federal transportation regulatory agency
W	FERC	Federal Energy Regulatory Commission	Regulates interstate transmission of electricity, gas, and oil
gti.	GTI	Gas Technology Institute	Supplies technical support and training for the energy industry
inc.	ICC	International Code Council	Family of model building codes, including the International Fire Code
IEEE	IEEE	Institute of Electrical and Electronics Engineers	Electrical standards
NERC	NERC	North American Electric Reliability Corporation	Produces standards for electric grid operation
NFPA	NFPA	National Fire Protection Association	Model codes and standards, including the National Electric Code
NST	NIST	National Institute of Standards and Technology	Measurement standards
SAE	SAE	Society of Automotive Engineers	Vehicle standards
	NARUC	National Association of Regulatory Utility Commissioners	Represents state public service commissions
(H)	UL	Underwriters Laboratory	Equipment and performance testing standards