GLOSSARY

Energy Terms

<u>A</u>

Aggregator: An entity responsible for planning, scheduling, accounting, billing, and settlement for energy deliveries from the aggregator's portfolio of sellers and/or buyers. Aggregators seek to bring together customers or generators so they can buy or sell power in bulk, making a profit on the transaction.

Air duct: A metal or insulated flexible passageway (rectangular, square or round shape) moving air from one place to another.

Air-sealing/insulation: insulation is usually found in walls and ceilings, especially the outside walls of a home where heat is most likely to be gained or lost. Its job is to keep one side of the wall, usually the inside, warmer than the outside of the wall.

Air source heat pump (ASHP): Air-source heat pumps don't generate heat, but simply move it from one place to another using a refrigerant. Because of this, they can deliver up to three times more heating or cooling energy to a home for the electricity consumed. Air-source heat pumps can be either central systems with ducts, or mini-split systems with air handlers in the rooms they're conditioning.

Video:

How It Works: Air Source Heat Pump - YouTube - English

How It Works: Air Source Heat Pump - YouTube - Spanish

Air Quality Index (AQI): A numerical index used for reporting severity of air pollution levels to the public. AQI levels range from 0 (Good air quality) to 500 (Hazardous air quality). The higher the index, the higher the level of pollutants and the greater the likelihood of health effects.

Air-to-water heat pumps: A type of air-source heat pump that uses water, instead of air, in the distribution system and provides heat through a radiator or baseboard.

Air supply and return: Heating and cooling systems that move air through ducts have both supply and return portions of the duct system. The supply and return ducts are connected to the heating and cooling equipment, which contains a heat exchanger and a blower. The supply air is pushed across the heat exchanger, and it is either heated or cooled before it is distributed throughout the house to deliver the tempered air. The air is then drawn back into the return ducts where it is returned to the heat exchanger, and the cycle starts over again. View Image

Air vent: Valve, either manual or automatic, to remove air from the highest point of a coil or piping assembly. View Image

Automated wood heat: A heating system that burns locally sourced, sustainable wood pellets instead of fossil fuels. Also called "Modern Wood Heat" or "Wood Pellet Boiler."

В

Baseboard radiator: Most modern boilers work by heating up water and then circulating it throughout the house through copper tubing that is connected to baseboard radiators. Much like a car radiator, baseboard radiators contain many "fins" that remove the energy from the hot water and dissipate it into the house. The water is returned to the boiler after its energy is removed so that it can be reheated and sent back through the piping system to the radiators. View Image

Battery storage: A device that stores energy in the form of chemical energy for use at a later time as electrical energy.

Biofuel: Fuel produced from renewable biomass material, commonly used as an alternative, cleaner fuel source.

Boiler: A fuel-burning apparatus or container for heating water. In an automated wood heating system, the boiler burns wood pellets. View Image

British thermal unit (BTU): This is the quantity of heat required to raise the temperature of a pound of water one degree from 59 degrees to 60 degrees.

<u>C</u>

Carbon Footprint: The total greenhouse gas (GHG) emissions caused by an individual, event, organization, service, or product.

Climate change: Also referred to as 'global climate change.' The term 'climate change' is sometimes used to refer to all forms of climatic inconsistency, but because the Eart's climate is never static, the term is more properly used to imply a significant change from one climatic condition to another. In some cases, 'climate change' has been used synonymously with the term, 'global warming;' scientists, however, tend to use the term in the wider sense to also include natural changes in climate. View Image

Cogeneration: Cogeneration means the sequential use of energy for the production of electrical and useful thermal energy. View Image

Condensing boiler: This is a Gas-fired boiler that achieves efficiency by condensing water vapor in exhaust gasses and recovering latent heat that would normally be lost up the flue. By doing so, it can achieve efficiency of 90 percent or higher. Condensing boilers require drainage and materials that won't be corroded by the slightly acidic condensate.

Clean energy: Technologies that significantly reduce or eliminate the use of energy from non-renewable sources through efficiency or conservation or by producing energy from the sun, wind, water, biomass, or any renewable, non-depletable or recyclable fuel.

Closed loop: A type of vertical loop-ground source heat pump system where the loop field system circulates an antifreeze solution through underground pipes. The anti-freeze solution inside the pipes is never mixed with groundwater underground.

Community Solar: A shared energy project where the energy created from the solar panels are distributed to multiple sources, such as a business or individual homes.

D

Decarbonization: this term refers to the reduction or elimination of carbon emissions from buildings and energy/transportation systems.

Direct Current (DC): Electricity that flows continuously in the same direction.

Distributed generation: A distributed generation system involves small amounts of generation located on a utility's distribution system for the purpose of meeting local (substation level) peak loads and/or displacing the need to build additional (or upgrade) local distribution lines.

DOER: The Massachusetts Department of Energy Resources (DOER) is a state agency that develops and implements policies and programs aimed at ensuring the adequacy, security, diversity, and cost-effectiveness of the Commonwealth's energy supply to create a clean, affordable, and resilient energy future.

Ducted: A heat pump that uses ductwork (connected to an indoor air-handling unit) as the indoor distribution.

DPU: The Department of Public Utilities (DPU) oversees investor-owned electric power, natural gas, and water companies in Massachusetts. In addition, the DPU regulates the safety of bus companies, moving companies, and transportation network companies

\mathbf{E}

Electric resistance heating: Heating systems which produce thermal energy by passing an electric current through a high resistance material, converting electrical energy into heat. Electric resistance heating is not as efficient as heat pumps, another heating solution that runs on electricity.

Electric vehicle (EV): A vehicle that uses electricity to charge a battery, which then discharges its energy to propel the vehicle.

Electric vehicle supply equipment (EVSE): Another name for an electric vehicle charging station. Infrastructure designed to supply power to EVs. EVSE can charge a wide variety of EVs including BEVs and PHEVs.4. View Image

Efficiency: This is the rate at which a system maximizes fuel use. This rate is numerically described as a ratio called AFUE for heating systems, EF for water heating systems, SEER for cooling systems, and HSPF for heat pump (heating and cooling) systems.

Energy burden: Energy burden is the percentage of household income that goes toward energy costs like electricity, home heating, and transportation. The less money you make, the greater your energy burden will be.

Energy assessment: A type of inspection that surveys the energy flow in a building. The main objective of the inspection to identify energy saving opportunities.

Energy efficiency: Energy Efficiency is the practice of using less energy to create the same level of output when it comes to the energy needs of homes and buildings.

Energy efficiency ratio (EER): A measure of how efficiently a cooling system will operate when the outdoor temperature is 95 degrees Fahrenheit. It is calculated by dividing the rated cooling output at 95 degrees Fahrenheit by the watts used by the AC/HP system. A higher EER means the system is more efficient. This is a term applied to air conditioning equipment.

Energy factor (EF): EF is based on the amount of hot water produced per unit of fuel consumed over a typical day. A higher EF means the system is more efficient.

Energy Star: The federal government-backed symbol for energy efficiency.

Environmental Justice (EJ): The fair treatment of people of all races and incomes with respect to development, implementation and enforcement of environmental laws, regulations and policies.

Energy Scam: These scams can come in many forms, ranging from attempts to steal personal information by posing as energy or utility companies to predatory practices such as locking unknowledgeable customers into long term energy contracts.

EV (electric vehicle): a vehicle powered by electricity, usually provided by batteries but may also be provided by photovoltaic (solar) cells or a fuel cell.

Eversource: A utility company that provides natural gas, electricity, and water service for Massachusetts, Connecticut, and New Hampshire. Service Territory | Eversource

Executive Office of Energy and Environmental Affairs (EEA): A cabinet-level office that oversees Massachusetts' environmental and energy agencies.

F

Fossil fuels: A non-renewable fuel source that is formed in the earth from plant or animal remains. Fossil fuels include oil, natural gas, propane, and coal.

Furnace: A combustion chamber; an enclosed structure in which fuel is burned to heat air or material. View Image

G

Geothermal: A common term used to describe ground-source heat pumps. This term can also refer to energy obtained by tapping underground reservoirs of heat, usually near volcanoes or other hot spots on the surface of the Earth. Video: Electric H&C Rebates Ad 1 (youtube.com)

Greenhouse gas (GHG) emissions: A gas that traps heat in Earth's atmosphere. Carbon dioxide and methane are examples of greenhouse gasses.

Grid: The electric utility companies' transmission and distribution system that links power plants to customers through high power transmission line service; high voltage primary service for industrial applications and street rail and bus systems; medium voltage primary service for commercial and

industrial applications; and secondary service for commercial and residential customers. Grid can also refer to the layout of a gas distribution system of a city or town in which pipes are laid in both directions in the streets and connected at intersections.

Gross area: The area of a surface including areas not belonging to that surface (such as windows and doors in a wall).

H

Heat exchanger: This transfers heat from combustion gasses to the air blowing through the ductwork. It is vital that none of the combustion gas itself gets into the air stream. The primary heat exchanger handles the hottest gasses. View Image

Heat pump water heater (HPWH): Like air-source heat pumps, heat pump water heaters don't generate heat, but simply move it from one place to another in the same way that a refrigerator does. Because of this, they can be two to three times more efficient than an electric resistance water heater.

HVAC (heating ventilation and air conditioning): A system that provides heating, ventilation and/or cooling within or associated with a building.

I

Incandescent bulb: An electric lamp in which a filament is heated by an electric current until it emits visible light. View Image

Indirect water heater: This circulates boiler water through a heat exchanger in the tank. The domestic hot water is contained in an insulated storage tank.

Infrared radiant heating: A gas-fired infrared heating system emulates the heat transfer of the sun by generating radiant energy that is converted into heat when absorbed by objects in its path. Infrared radiant heating is the most efficient and effective method in which to heat under the diverse conditions present in warehouses, storerooms, and even the most immense structures imaginable.

Induction stove: An electric stovetop that uses magnetic fields to generate heat in cookware instead of generating heat from an electric resistance coil. Induction stoves are more efficient and offer more temperature control precision than traditional stoves. View Image

Insulation: The material used to slow heat transfer through the building envelope (walls, roof, floors, etc.). Common types of insulation include fiberglass, cellulose, and foam board. View Image

<u>J</u>

K

Kilowatt (kW): One thousand (1,000) watts. A unit of measure of the amount of electricity needed to operate given equipment. On a hot summer afternoon a typical home, with central air conditioning and other equipment in use, might have a demand of four kW each hour.

Kilowatt-Hour (kWh): The most commonly-used unit of measure telling the amount of electricity consumed over time. It means one kilowatt of electricity supplied for one hour. In 1989, a typical California household consumed 534 kWh in an average month.

L

Language access: Language access refers to communications that are released by utilities, government bodies, and other energy-related organizations that are available in multiple languages, ensuring people can understand important messages and make educated decisions.

LNG (liquified natural gas): Natural gas that has been condensed to a liquid, typically by cryogenically cooling the gas to minus 260 degrees Fahrenheit (below zero).

Lithium ion (Li-Ion) battery: A type of rechargeable battery. In the batteries lithium ions move from the negative electrode to the positive electrode during discharge and back when charging.

M

Mini-split heat pump (MSHP): These systems, also called ductless heat pumps or air-source heat pumps, have an outdoor condenser unit connected to one or more indoor units. These units provide heating and cooling for homes. The system pulls air from the outdoors through a refrigerant line, to heat the space during the winter, and does the reverse in the summer by pulling heat from the home to the outside to cool the space. Because of this, they can deliver up to three times more heating or cooling energy to a home for the electricity consumed.

MassCEC: The Massachusetts Clean Energy Center (MassCEC) is a state economic development agency dedicated to accelerating the growth of the clean energy sector to meet the Commonwealth's clean energy, climate, and economic development goals.

Mass Save: Collaborative of Massachusetts' natural gas, electric utilities, and energy efficiency service providers to help Massachusetts' residents save money and energy through energy efficiency measures.

Massachusetts utilities: The main utilities companies that operate in Massachusetts are National Grid and Eversource. For a more comprehensive list that lists specific service providers based on municipalities, visit this website: Find My Electric, Gas, and Water Company | Mass.gov

N

National Grid: A utility company that provides natural gas, electricity, and water service for Massachusetts. Find My Electric, Gas, and Water Company | Mass.gov

Net metering: A billing mechanism that credits solar energy system owners for the electricity they add to the grid.

Net Zero emissions: When the total amount of greenhouse gas emissions is equal to or less than the amount of carbon dioxide or its equivalent that is removed from the atmosphere and stored in Earth's systems annually. The Commonwealth aims to be net zero emissions by 2050.

Northeast Energy Efficiency Partnership: Northeast Energy Efficiency Partnership (NEEP) is a non-profit accelerating energy efficiency in the Northeast and Mid-Atlantic states. It is one of six Regional Energy Efficiency Organizations (REEOs) funded, in part, by US Department of Energy to support state efficiency policies and programs.

<u>O</u>

Outdoor reset controls: Outdoor reset controls reduce the temperature in a boiler during moderate outside temperatures when high-temperature supply water isn't necessary to maintain indoor comfort. This reduces standby losses and, in the case of condensing boilers, allows return water temperature to be low enough to condense.

Outdoor unit: The part of an air-source heat pump that is outside where the refrigerant absorbs heat in the winter and rejects heat in the summer to transfer heat between the indoors and the outdoors and condition the home. View Image

P

Programmable thermostat: A thermostat that can be set to adjust the temperature of a home based on the time of day and week, in order to use less energy when it is not needed.

Peak load: The electric load that corresponds to a maximum level of electric demand in a specified time period.

Q

R

Radiation: This is a heat that moves out in waves from a central point and heats objects in its path. The level of heat that is felt is determined by the proximity to the heat source.

Retrofit: broad term that applies to any change after the original purchase, such as adding equipment not a part of the original purchase. As applied to alternative fuel vehicles, it refers to conversion devices or kits for conventional fuel vehicles. (Same as after-market)

Roof mounted: Solar collectors mounted on the roof of a building. Collectors are generally mounted directly to the roof, but sometimes they are tilted up at a different angle (especially on flat roofs) to optimize their solar exposure. View Image

<u>S</u>

Seasonal energy-efficiency ratio (SEER): This is a measure of efficiency over an entire cooling season as opposed to a single outdoor temperature. SEER is an indicator of the total amount of cooling the air conditioner will provide over the entire cooling season, divided by the total number of electricity it will consume. A higher SEER means the system is more efficient. This is a term applied to air conditioning equipment, including air-source heat pumps.

Sizing: This is the procedure a heating contractor goes through to determine how large a system is needed to heat a house efficiently. Too small a system will not deliver enough heating, while too large a system

increases energy costs and can have an adverse effect on comfort. Sizing depends on the square footage of a home, the amount of ceiling and wall insulation, the window area, and use of storm doors and storm windows.

Steam radiator: Some hot water boilers, typically older ones, heat a house by delivering steam instead of hot water. While hot water systems circulate heated water through a closed system of radiators (often baseboard style), steam radiators allow the pressure of the steam to vent out, thereby dropping the temperature so that the steam converts to water and runs back to the boiler to be reheated into steam.

Solar collectors: Solar collectors are devices that collect solar radiation from the sun. These devices are primarily used for heating water for personal use. These collectors are often mounted on the roof, although they can also be mounted on the ground or on the side of a building.

Solar hot water: A hot water system that uses heat from the sun to heat a fluid in solar collectors that is then circulated to a hot water tank where the fluid transfers heat for domestic hot water use (e.g., showers, washing dishes). Also called "Solar Thermal."

Solar photovoltaics (PV): Solar panels that use the sun's radiation to generate electricity. View Image

 \mathbf{T}

Therm: This is another measurement of heat. One therm equals approximately 100,000 BTUH.

Thermal Storage: A system which stores thermal energy for use in supplementing or offsetting heating system output. A hot water tank is used for thermal storage in an automated wood heating system.

Transformer: A device, which through electromagnetic induction but without the use of moving parts, transforms alternating or intermittent electric energy in one circuit into energy of similar type in another circuit, commonly with altered values of voltage and current. View Image

Tankless water heater: A tankless water heater (also called an on-demand water heater) heats water as it's requested, rather than preheating and storing it. Because of this, they don't have the standby efficiency losses of storage water heaters, and never run out of hot water. However, their flow rate is limited, so one tankless water heater may not be able to handle multiple simultaneous uses.

U

 $\underline{\mathbf{V}}$

Vertical loop: A type of ground-source heat pump system where the outdoor heat exchanger is an underground loop field drilled hundreds of feet into the group in one or more boreholes.

 $\underline{\mathbf{W}}$

Wall mounted: Solar collectors mounted on the side of a building. Collectors can be mounted flush to the wall or tilted at a different angle to optimize solar exposure (sometimes called an awning mount). View Image

Weatherization: The process of making a home better protected from extreme weather, which often involves sealing up air leaks and adding insulation in your home.

Wood pellets: Small pieces of dried and compressed wood. Wood pellets are burned instead of fossil fuels in an automated wood heating system.

Wood pellet boiler: A common term used to refer to automated wood heating systems. A wood pellet boiler is a boiler that burns wood pellets as the fuel.

 $\underline{\mathbf{X}}$

 $\underline{\mathbf{Y}}$

<u>Z</u>

Zoning: This is a system in which living areas are divided into separate spaces, with each space's heating and air conditioning controlled independently. This can be accomplished by using either multiple independent systems, or a single system using electronic controls or motorized dampers.

Environmental Justice Terms

<u>A</u>

Aggregator: An entity responsible for planning, scheduling, accounting, billing, and settlement for energy deliveries from the aggregator's portfolio of sellers and/or buyers. Aggregators seek to bring together customers or generators so they can buy or sell power in bulk, making a profit on the transaction.

Active Transportation: People-powered forms of transportation, such as walking, bicycling, etc. Active transportation relies on walkways and bikeways to connect neighborhoods and communities to people's jobs, recreation areas, schools, and other places that meet people's daily needs. Active transportation systems are important because they help people get to where they need to go without personal vehicles, which improves air quality, reduces greenhouse gas emissions, increases access to resources, and promotes public health and more livable communities.

B

Brownfield: A brownfield is a former industrial or commercial site that contains toxics and environmental contamination. Brownfield redevelopment must ensure that sites go through high-quality processes for environmental analysis, clean-up, public notice, and public commenting and participation before any redevelopment occurs.

Buffer: A buffer creates a physical space between two different types of neighborhoods or zones in order to protect sensitive areas (e.g., where people live or go to school) from harmful land uses (which produce pollution and other hazards). Buffers can be created by putting a transition zone in between a sensitive neighborhood and a harmful one (such as by putting a commercial business zone in between a residential neighborhood and an industrial zone), or by putting landscaping and parks (also called green space, greenways, or open space) between two different zones.

\mathbf{C}

Climate change: The long-term changes in usual weather patterns of a given region, resulting in severe weather events that are more frequent, more intense, and longer in duration. These types of changes range from more frequent violent rainstorms causing flooding, to extended periods of droughts and dryness. Natural factors include solar variations, volcanic eruptions, and ocean currents, and have contributed to changes in our climate for millions of years. However, the rapid rate of change we have experienced over the past decades is alarming and can be attributed to human activity. Human activity has increased the amount of greenhouse gases in the atmosphere since the Industrial Revolution, leading to more heat retention and an increase in surface temperatures.

<u>D</u>

Disproportionate effects - situations of concern where there exists significantly higher and more adverse health and environmental effects on minority populations, low-income populations or indigenous peoples.

Decarbonization: Shifting away from energy systems that produce and emit carbon dioxide into the atmosphere. This shift emphasizes the need to rely on renewables and alternative low-carbon energy sources.

<u>E</u>

Environmental Justice (EJ) - The fair treatment and meaningful involvement of all people regardless of race, color, culture, national origin, income, and educational levels with respect to the development, implementation, and enforcement of protective environmental laws, regulations, and policies.

Energy assistance: Energy Assistance is an umbrella term describing different types of programs aimed at reducing energy insecurity and burden and increasing energy affordability. These programs typically take the form of direct cash assistance (bill discounts, low-income rates, donation programs, crisis assistance), conservation (low income energy efficiency or weatherization programs to help customers use less energy) or programs that help customers set up payment plans for overdue energy bills (sometimes called "arrearage management").

Energy burden: Energy Burden is how much of your household income you pay for energy. It typically ranges from close to zero to over 15%.

F

Fair treatment: The principle that no group of people, including a racial, ethnic or a socioeconomic group, should bear a disproportionate share of the negative environmental consequences from industrial, municipal and commercial operations or the execution of federal, state, local and tribal programs and policies.

Food sovereignty: Food sovereignty refers to people's right to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define and control their own food and agriculture systems.

\mathbf{G}

<u>H</u>

Health equity: Striving for the highest possible standard of health for all people and giving special attention to the needs of those at greatest risk of poor health based on social conditions. Ensuring that everyone has a fair and just opportunity to be healthy by eliminating disparities and improving the health of all groups.

Healthy food access: Access to safe, culturally acceptable, nutritionally adequate diet through a sustainable food system that maximizes community self-reliance and social justice.

I

Indigenous Peoples: State-recognized tribes; indigenous and tribal community-based organizations; individual members of federally recognized tribes, including those living on a different reservation or living outside Indian country; individual members of state-recognized tribes; Native Hawaiians; Native Pacific Islanders; and individual Native Americans.

Justice40: A whole-of-government effort to ensure that Federal agencies work with states and local communities to make good on President Biden's promise to deliver at least 40 percent of the overall benefits from Federal investments in climate and clean energy to disadvantaged communities.

<u>K</u>

L

Low-Income: A reference to populations characterized by limited economic resources. The US Office of Management and Budget has designated the Census Bureau's annual poverty measure as the official metric for program planning and analysis, although other definitions exist.

M

Minority Populations: According to the U.S. Census Bureau, population of people who are not single-race white and not Hispanic. Populations of individuals who are members of the following population groups: American Indian or Alaskan Native; Asian or Pacific Islander; Black, not of Hispanic origin; or Hispanic.

Mitigation: Processes that can reduce the amount and speed of future climate change by reducing emissions of heat-trapping gases or removing them from the atmosphere.

N

<u>O</u>

Overburdened Community: Minority, low-income, tribal, or indigenous populations or geographic locations in the United States that potentially experience disproportionate environmental harms and risks. This disproportionality can be as a result of greater vulnerability to environmental hazards, lack of opportunity for public participation, or other factors. Increased vulnerability may be attributable to an accumulation of negative or lack of positive environmental, health, economic, or social conditions within these populations or places.

<u>P</u>

Q

<u>R</u>

Resilience: A capability to anticipate, prepare for, respond to, and recover from significant multi-hazard threats with minimum damage to social well-being, the economy, and the environment.

<u>S</u>

<u>T</u>

U

Urban Sprawl: Urban sprawl happens when housing, commercial development, and/or roadways are developed beyond city limits and in greenfields or in low-density communities. Such development patterns have little concern for planning or protecting the environment and make cars an absolute necessity for going from one place to another.

Acronyms Glossary

Acronym	Long Name
ACCA	Air Conditioning Contractors of America
ACEEE	American Council for an Energy-Efficient Economy
ACP	Alternative Compliance Plan or Alternative Compliance Payment
ACT	Accelerating Clean Transportation
AHRI	Air-Conditioning, Heating, and Refrigeration Institute
AIA	American Institute of Architects
AMI	Advanced Metering Infrastructure
APS	Alternative Energy Portfolio Standard
ARPA	American Rescue Plan Act
ARRA	American Recovery and Reinvestment Act
ASAP	Appliance Standards Awareness Project
ASE	Alliance to Save Energy
ASHRAE	American Society of Heating, Refrigerating, and Air-Conditioning Engineers
BBRS	MA Board of Building Regulations and Standards
BEV	Battery electric vehicle
BPI	Building Performance Institute
C&I	Commercial & Industrial
CBEI	Commonwealth Building Energy Intelligence
CEA	Cambridge Energy Alliance
CEC	MA Clean Energy Center
CEE	Consortium for Energy Efficiency
CEI	Commonwealth Energy Intelligence program
CFLs	Compact Fluorescent Lights
СНР	Combined Heat and Power
CIP	Capital Investment Plan
CoFFEE	Commonwealth Facility Fund for Energy Efficiency
COP	Coefficient of performance
CSG	Conservation Services Group
DAR	MA Department of Agricultural Resources
DCR	MA Department of Conservation and Recreation
EDC	Electric Distribution Company
DEP	MA Department of Environmental Protection
DOC	MA Department of Corrections
DOE	U.S. Department of Energy
DOR	MA Department of Revenue
DPH	MA Department of Public Health
DPU	MA Department of Public Utilities
DR	Demand Reduction
EAP	Energy Audit Program (municipal)
EC (or ExCom)	Executive Committee
ECM	Electronically Commutated Motor

EE	Energy Efficiency
EEA	MA Executive Office of Energy and Environmental Affairs
EEAC	Energy Efficiency Advisory Council
EECBG	Energy Efficiency and Community Block Grants
EES	Energy Efficiency Surcharge(s)
EIS	Energy Information System (energy tracking database)
EISA	Energy Independence and Security Act
EM&V	Evaluation, Monitoring and Verification Activities
EOAF (ANF)	MA Executive Office of Administration and Finance
EOED	Executive Office of Economic Development (formerly Executive Office of
EGEB	Housing and Economic Development)
EOHLC	Executive Office of Housing and Livable Communities (formerly MA
	Department of Housing and Community Development)
EOHS	Executive Office of Health and Human Services
EPA	U.S. Environmental Protection Agency
ESCO	Energy Service Company
EV	Electric Vehicle
EVICC	Electric Vehicle Infrastructure Coordinating Council
EVSE	Electric vehicle supply equipment (e.g., charging stations)
EWG	Equity Working Group
FCEV	Fuel Cell Electric Vehicle
GCA	Green Communities Act
GCA	Green Communities Division
GHG	Greenhouse Gas
GMAC	Grid Modernization Advisory Council
GWSA	Global Warming Solutions Act
HBA	Home Builders Association
HEA	Home Energy Assessment
HERS	
HES	Home Energy Rating System
HEV	Home Energy Services
	Hybrid electric vehicle
HPCs	Home Performance Contractors
HPWH HVAC	Heat Pump Water Heater
	Heating, Ventilation, and Air Conditioning
IECC	International Energy Conservation Code
IICs IIJA	Independent Installation Contractors Infrastructure Investment and Jobs Act
ISO	Independent System Operator
kBTU	Kilo British Thermal Units
kWh	Kilo-watt hour - one thousand watts per hour
LBE	Leading by Example Division
LBER	Large Building Energy Reporting
LEDs	Light Emitting Diodes
LEED	Leadership in Energy and Environmental Design
MassCEC	MA Clean Energy Center
MASSPORT	Massachusetts Port Authority

MBTA	Massachusetts Bay Transportation Authority, also known as The T		
MEI	Mass Energy Insight		
MEPA	Massachusetts Environmental Policy Act Office		
MFNC	Multi-Family New Construction		
	One Million British Thermal Units		
MMBtu MOD EV			
MOR-EV	Massachusetts Offers Rebates for Electric Vehicles		
MRET	Massachusetts Renewable Energy Trust		
MSBA	Massachusetts School Building Authority		
MW	Megawatt one million watts		
MWRA	Massachusetts Water Resources Authority		
NAPEE	National Action Plan for Energy Efficiency		
NASEO	National Association of State Energy Officials		
NATE	North American Technician Excellence		
NBI	New Buildings Institute		
NCP	Negotiated Cooperative Promotions		
NEEP	Northeast Energy Efficiency Partnership		
NESEA	Northeast Sustainable Energy Association		
OEJE	Office of Environmental Justice and Equity		
OSD	MA Operational Services Division		
PA	Program Administrator (investor-owned utilities plus the Cape Light Compact)		
PHCC of MA	Plumbing, Heating and Cooling Contractors of MA		
PHEV	Plug-in hybrid electric vehicle		
PP&A	Policy Planning and Analysis Division		
PPA	Power Purchase Agreement		
PV	Photovoltaic (solar panel)		
QA/QC	Quality Assurance/Quality Control		
QECBS	Qualified Energy Conservation Bonds		
QIV	Quality Installation Program		
RCS	Residential Conservation Services Program		
REC	Renewable Energy Certificate		
RESNET	Residential Energy Services Network		
RFI	Request for Information		
RFP	Request for Proposal		
RFQ	Request for Quote		
RFR	Request for Response(s)		
RPS	Renewable Portfolio Standard		
RTO	Regional Transmission Organization		
SHMCAP	State Hazard Mitigation and Climate Adaptation Plan		
SMART	Solar Massachusetts Renewable Target - solar PV incentive program		
	administered by DOER		
SRECs	Solar Renewable Energy Certifications		
UDRH	User Defined Reference Home		
USGBC	U.S. Green Building Council		
U-Value	Energy efficiency rating for window		
ZEV	Zero emission vehicle		
ZEVC	Zero Emission Vehicle Commission		
ZE V C	Zero Limission vehicle Commission		