

Acronyms and Abbreviations

\$/kWh	dollars per kilowatt-hour
\$/MM	millions of dollars
\$/MWh	dollars per megawatt-hour
\$/t	dollars per metric ton
\$/tCO ₂ e	dollars per metric ton of carbon dioxide equivalent
AAR	American Association of Railroads
AASHTO	<u>American Association of State Highway & Transportation Officials</u>
ac	Acre
AEO2007	<i>Annual Energy Outlook 2007</i>
AEO2008	<i>Annual Energy Outlook 2008</i>
AFW	Agriculture, Forestry, and Waste Management [Subcommittee]
AFUE	annual fuel utilization efficiency
AFW	Agriculture, Forestry, and Waste Management
AIA	American Institute of Architects
ANL	Argonne National Laboratory
ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers
B20	fuel blend of 20% biodiesel and 80% gasoline
B100	fuel consisting of 100% biodiesel
BAU	business as usual
BBtu	billion British thermal units
BMP	best management practice
BBtu	billions of British thermal unit
BELC	Business Environmental Leadership Council
BOC	Building Operator Certification
BRT	bus rapid transit
Btu	British thermal unit
C	Carbon
CAA	Clean Air Act
CAFE	corporate average fuel economy
CAFO	concentrated animal feeding operation
CARB	California Air Resources Board
CC	Cross-Cutting Issues [Subcommittee]
CCS	carbon capture and storage
CCSR	carbon capture and storage or reuse
CCX	Chicago Climate Exchange
CDD	cooling degree-days
CEBCS	Commercial Buildings Energy Consumption Survey
CEEE	Center for Energy and Environmental Education

cf	cubic feet
CFL	compact fluorescent light
CH ₄	Methane
CHP	combined heat and power
CMAQ	Congestion Mitigation and Air Quality
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
CPP	critical peak pricing
CRE	Clean and Renewable Energy [Subcommittee]
CRP	Conservation Reserve Program [USDA]
CSA	community-supported agriculture
CTRE	Center for Transportation Research and Education
CUTR	Center for Urban Transportation Research
DART	Des Moines Area Rapid Transit
DG	distributed generation
DNR	[Iowa] Department of Natural Resources
DOE	[United States] Department of Energy
DOT	[Iowa] Department of Transportation
DSM	demand-side management
E10	fuel blend of 10% ethanol and 90% gasoline
E85	fuel blend of 85% ethanol and 15% gasoline
EE	energy efficiency
EEC	Energy Efficiency and Conservation [Subcommittee]
EEP	energy efficiency plan
eGRID	Emissions & Generation Resource Integrated Database
EIA	Energy Information Administration [US DOE]
EISA	Energy Independence and Security Act of 2007
EOR	enhanced oil recovery
EPA	[United States] Environmental Protection Agency
EPAct	Energy Policy Act of 2005
EPRI	Electric Power Research Institute
EPS	environmental portfolio standard
ES	Energy Supply
FAA	Federal Aviation Administration
FERC	Federal Energy Regulatory Commission
FHWA	Federal Highway Administration
FIA	Forest Inventory and Analysis [USFS]
ft	Foot
FTE	full-time-equivalent
FY	fiscal year
gal	Gallon
GAP	Gap Analysis Program
GHG	greenhouse gas
GJ	Gigajoule

GM	genetically modified
GPS	global positioning system
GREET	Greenhouse gases, Regulated Emissions and Energy use in Transportation [model]
GWh	gigawatt-hour [one million kilowatt-hours]
GWP	global warming potential
HB	House Bill
HDD	heating degree-day
HDPE	high-density polyethylene
HDV	heavy-duty vehicle
HFC	Hydrofluorocarbon
HOV	high-occupancy vehicle
HR	House Resolution
HUD	[United States] Department of Housing and Urban Development
HVAC	heating, ventilation, and air conditioning
HWP	harvested wood product
I&F	Inventory and Forecast
IAC	Industrial Assessment Center
IAMU	Iowa Association of Municipal Utilities
ICCAC	Iowa Climate Change Advisory Council
ICCC	Iowa Clean Cities Coalition
ICCT	International Council on Clean Transportation
ICLEI	Local Governments for Sustainability [formerly International Council for Local Environmental Initiatives]
IDALS	Iowa Department of Agriculture and Land Stewardship
IDED	Iowa Department of Economic Development
IDNR	Iowa Department of Natural Resources
IDED	Iowa Department of Economic Development
IEC	Iowa Energy Center
IECC	International Energy Conservation Code
IESNA	Illuminating Engineering Society of North America
IGCC	integrated gasification combined cycle
IOU	investor-owned utility
IPCC	Intergovernmental Panel on Climate Change
ISU	Iowa State University
IUB	Iowa Utilities Board
K-12	kindergarten through 12th grade
kg	Kilogram
kW	Kilowatt
kWh	kilowatt-hour
lb	Pound

LCFS	low-carbon fuel standard
LDPE	low-density polyethylene
LDV	light-duty vehicle
LED	light-emitting diode
LEED	Leadership in Energy and Environmental Design [Green Building Rating System™]
LEED-ND	Leadership in Energy and Environmental Design for Neighborhood Development
LFG	landfill gas
LFGcost	landfill gas cost model
LFGTE	landfill gas-to-energy
LIHEAP	Low-Income Home Energy Assistance Program
LMOP	Landfill Methane Outreach Program [US EPA]
LNG	liquefied natural gas
LRR	low-rolling resistance
LULC	land use land cover
MAC	mitigation abatement cost
MAPP	Mid-Continent Area Power Pool
MEC	Manufacturers Energy Consumption Survey
metric ton	1,000 kilograms or 22,051 pounds
MGA	Midwestern Governors Association
MJ	Megajoule
MM	Million
MMBtu	millions of British thermal units
MMtCO ₂ e	million metric tons of carbon dioxide equivalent
mpg	miles per gallon
mph	miles per hour
MRF	material recovery facility
MSA	metropolitan statistical areas
MSW	municipal solid waste
MW	megawatt [one thousand kilowatts]
MWh	megawatt-hour [one thousand kilowatt-hours]
N	Nitrogen
N ₂ O	nitrous oxide
N/A	not applicable
NAHB	National Association of Home Builders
NAS	National Academies of Science
NEED	National Energy Education Development
NEI	National Emissions Inventory
NEMA	National Electrical Manufacturing Association
NESCAUM	Northeast States for Coordinated Air Use Management
NG	natural gas

NGCC	natural gas combined cycle
NGO	nongovernmental organization
NGTT	natural gas combustion turbine
NHTS	National Household Travel Survey
NIH	National Institutes of Health
NO ₃	Nitrate
NO _x	oxides of nitrogen
NOAA	National Oceanic and Atmospheric Administration
NPV	net present value
NRC	Nuclear Regulatory Commission
NRCS	[USDA] Natural Resources Conservation Service
NREL	National Renewable Energy Laboratory [US DOE]
NRI	National Resources Inventory [USDA]
NSF	National Science Foundation
O&M	operation and maintenance
OCA	[Iowa] Office of Consumer Advocate
ODS	ozone-depleting substance
OEI	[Iowa] Office of Energy Independence
ORNL	Oak Ridge National Laboratory
P	phosphorus
PET	polyethylene terephthalate
PFC	perfluorocarbon
PHEV	plug-in hybrid electric vehicle
PIRG	Public Interest Research Group
PRI	Program-Related Investment
PURPA	Public Utilities Regulatory Policies Act
PV	photovoltaic
R&D	research and development
RCI	Residential, Commercial, and Industrial
REC	rural electric cooperative
REC	renewable energy certificate
RECS	Residential Energy Consumption Survey
ReEC	Renewable Energy Education in the Community
REFIT	renewable energy feed-in tariff
RISE	Revitalize Iowa's Sound Economy
RFIB	Renewable Fuels Infrastructure Board
RFS	renewable fuel standard
RPS	renewable portfolio standard
RTA	Regional Transit Authority
SB	Senate Bill
SC	Subcommittee

SEC	State Energy Council
SEER	seasonal energy efficiency ratio
SF ₆	sulfur hexafluoride
SIT	State [GHG] Inventory Tool [US EPA]
SO ₂	sulfur dioxide
SO _x	oxides of sulfur
STASGO	State Soil Geographic Databases
STB	Surface Transportation Board
T&D	transmission and distribution
t	metric ton
tC	metric tons of carbon
tCO ₂	metric tons of carbon dioxide
tCO ₂ e	metric tons of carbon dioxide equivalent
tCO ₂ e/MWh	metric tons of carbon dioxide equivalent per megawatt-hour
TDR	transfer of development rights
TLU	Transportation and Land Use [Subcommittee]
TOD	time-of-day
TOD	transit-oriented development
ULI	Urban Land Institute
UNFCCC	United Nations Framework Convention on Climate Change
UNI	University of Northern Iowa
USDA	United States Department of Agriculture
US DOE	United States Department of Energy
US EPA	United States Environmental Protection Agency
USFS	United States Forest Service [USDA]
USGS	United States Geological Survey [U.S. Department of the Interior]
VEGA	Vehicle Energy and Greenhouse Gas Assessment
VMT	vehicle miles traveled
VOC	volatile organic compound
WARM	Waste Reduction Model [US EPA]
WTE	waste to energy
WWTP	wastewater treatment plant
yr	year