

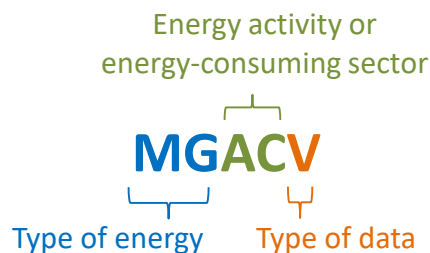
Section 1. Documentation Guide

This section describes the common data identification codes used in the State Energy Data System (SEDS). Sections 2 through 6 provide information for each of the major energy sources: coal, natural gas, petroleum, renewable energy, and electricity. Section 7 describes adjustments for consumption of industrial process fuel, intermediate products, and other uncosted energy sources that SEDS removes to calculate expenditures.

Section 8 “Other Indicators” presents the degree day data, resident population data used in per capita calculations, and current-dollar gross domestic product (GDP) used to calculate energy expenditures per dollar of GDP. Appendix A is an alphabetical listing of all the variable names and formulas used in the price and expenditure module. Appendix B provides metric and other physical conversion factors for measures used in energy analyses. Appendix C summarizes the changes in SEDS content made since the last complete release of data.

There are about 1,000 variables in SEDS, each identified by a unique five-character mnemonic series name, or MSN. All published MSNs are listed in the Codes and Descriptions file on the SEDS website here: https://www.eia.gov/state/seds/CDF/Codes_and_Descriptions.xlsx.

In the following example, MGACV is the identifying code for motor gasoline expenditures in the transportation sector in million dollars:



The first two characters in the SEDS variable names represent energy sources and products:

- AR = asphalt and road oil
- AV = aviation gasoline
- CC = coal coke
- CL = coal

- DF = distillate fuel oil
- EL = electricity
- EM = fuel ethanol, excluding denaturant
- ES = electricity sales
- FN = petrochemical feedstocks, naphtha less than 401°F
- FO = petrochemical feedstocks, other oils equal to or greater than 401°F
- FS = petrochemical feedstocks, still gas
- HL = hydrocarbon gas liquids
- JF = jet fuel
- KS = kerosene
- LU = lubricants
- MG = motor gasoline
- MS = miscellaneous petroleum products
- NG = natural gas, including supplemental gaseous fuels
- NU = nuclear electric power
- OH = other hydrocarbon gas liquids
- OP = other petroleum products
- P1 = asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke, and other petroleum products
- P5 = other intermediate products (petroleum only)
- PA = all petroleum products
- PC = petroleum coke
- PE = primary energy
- PQ = propane
- RF = residual fuel oil
- SN = special naphtha
- TE = total energy
- TN = end-use energy consumption
- WD = wood
- WW = wood and waste
- WX = waxes

SEDS assumes that there are no direct fuel costs for hydroelectric (HY), geothermal (GE), solar thermal and photovoltaic (SO), and wind (WY) energy. There are no price and expenditure MSNs for these energy sources.

The third and fourth characters in the SEDS variable names have several meanings and some are specific to only certain energy sources. First,

many represent the energy-consuming sectors:

- AC = transportation sector
- CC = commercial sector
- EG = electric power sector (generation)
- EI = electric power sector (consumption)
- ET = total cost of electricity generation (nuclear only)
- IC = industrial sector
- RC = residential sector
- TC = total consumption of all energy-consuming sectors
- TX = total end-use consumption

“TP” in the third and fourth characters represents per capita expenditures.

The third and fourth characters in the SEDS variable names also indicates activities such as trade and subsectors that SEDS uses to calculate prices and expenditures. Examples are:

- EX = exports
- IM = imports
- IS = industrial consumption, costed
- KC = coke plants (coal only)
- NI = net imports
- OC = industrial consumption, excluding coke plants.

Lastly, the third and fourth characters in the SEDS variable names identify the activities used to calculate adjusted consumption for the expenditure calculations. Examples are:

- AS = transportation sector adjusted consumption
- CS = commercial sector adjusted consumption
- IS = industrial sector adjusted consumption
- RS = residential sector adjusted consumption
- SC = total adjusted consumption, all sectors
- SS = total adjusted consumption, all end-use sectors

Section 7 describes all the variables used in the calculation of adjusted consumption and Appendix A2 lists the MSNs and the formulas.

The fifth character of the SEDS variable name identifies the units or type of data:

- B = consumption in British thermal units (Btu)
- D = price in dollars per million Btu
- K = factor for converting data from physical units to Btu
- P = data in standardized physical units
- S = share or ratio expressed as a fraction
- V = expenditure in million dollars

Table TN1.1. Geographic area codes used in the State Energy Data System

Code	State	Code	State
AK	Alaska	MT	Montana
AL	Alabama	NC	North Carolina
AR	Arkansas	ND	North Dakota
AZ	Arizona	NE	Nebraska
CA	California	NH	New Hampshire
CO	Colorado	NJ	New Jersey
CT	Connecticut	NM	New Mexico
DC	District of Columbia	NV	Nevada
DE	Delaware	NY	New York
FL	Florida	OH	Ohio
GA	Georgia	OK	Oklahoma
HI	Hawaii	OR	Oregon
IA	Iowa	PA	Pennsylvania
ID	Idaho	RI	Rhode Island
IL	Illinois	SC	South Carolina
IN	Indiana	SD	South Dakota
KS	Kansas	TN	Tennessee
KY	Kentucky	TX	Texas
LA	Louisiana	UT	Utah
MA	Massachusetts	VA	Virginia
MD	Maryland	VT	Vermont
ME	Maine	WA	Washington
MI	Michigan	WI	Wisconsin
MN	Minnesota	WV	West Virginia
MO	Missouri	WY	Wyoming
MS	Mississippi	US	United States

There are a few variables that do not follow the convention:

- GDPRV = current-dollar gross domestic product (GDP)
- TEGDS = total energy expenditures as percent of current-dollar GDP
- TPOPP = resident population
- ZWCDP = cooling degree days
- ZWHDP = heating degree days

Throughout the Technical Notes, SEDS often describes the variables with a geographic identification attached to them. Geographic areas used in SEDS are the 50 states, the District of Columbia (represented by the U.S. Postal Service state abbreviations), and the United States as a whole. In SEDS, the term “state” includes the District of Columbia.

Table TN1.1 shows the geographic area codes used in SEDS.