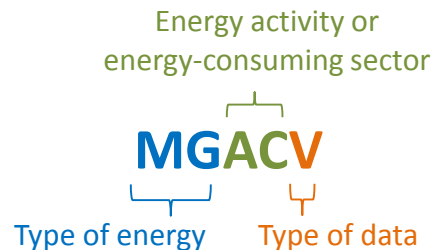# Section 1. Documentation Guide

This section describes the data identification codes 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 and intermediate products and other uncosted energy sources that are removed in the calculation of expenditures.

Appendix A is an alphabetical listing of the variable names and formulas used in the price and expenditure module. Appendix B presents the current-dollar gross domestic product (GDP) by state used to calculate energy expenditures as percent of GDP. Appendix C provides metric and other physical conversion factors for measures used in energy analyses. Appendix D summarizes the changes in SEDS content made since the last complete release of data.

There are about 1,000 variables in SEDS. All of the variables are identified by five-character mnemonic series names, or MSN. In the following example, MGACV is the identifying code for motor gasoline expenditures in the transportation sector in million dollars.

Energy activity or
energy-consuming sector

MGACV

Type of energy   Type of data

The energy sources and products used in the price and expenditure module in SEDS, represented by the first two letters of the variable name, are:

AR	=	asphalt and road oil
AV	=	aviation gasoline
CC	=	coal coke
CL	=	coal
DF	=	distillate fuel oil
DK	=	distillate fuel oil, including kerosene-type jet fuel
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
JF	=	jet fuel
KS	=	kerosene
LG	=	liquefied petroleum gases
LU	=	lubricants
MG	=	motor gasoline
MS	=	miscellaneous petroleum products
NG	=	natural gas, including supplemental gaseous fuels
NU	=	nuclear electric power
P1	=	asphalt and road oil, aviation gasoline, kerosene, lubricants, and other petroleum products
PA	=	all petroleum products
PC	=	petroleum coke
PE	=	primary energy
PO	=	other petroleum products
RF	=	residual fuel oil
SN	=	special naphtha
TE	=	total energy
WD	=	wood
WW	=	wood and waste
WX	=	waxes

It is assumed 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 energy-consuming sectors, identified by characters three and four of the variable name, are:

AC	=	transportation sector
CC	=	commercial sector
EG	=	electric power sector (generation)
EI	=	electric power sector (consumption)

IC　=　industrial sector

RC　=　residential sector

TC　=　total consumption of all energy-consuming sectors

TX　=　total end-use consumption

Per capita expenditure is represented by "TP" in the third and fourth positions of the variable name.

Energy activities, mostly used in intermediate calculations, are also identified by characters three and four of the variable name. Examples are:

EX　=　exports

IM　=　imports

IS　=　industrial consumption, costed

OC　=　industrial consumption, excluding coke plants.

The fifth character of the variable name in SEDS identifies the type of data by using one of the following letters:

B　=　consumption in British thermal units (Btu)

D　=　price in dollars per million Btu

K　=　factor for converting data from physical units to Btu

S　=　share or ratio expressed as a fraction

V　=　expenditure in million dollars

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

TPOPP　=　resident population

GDPRV　=　current-dollar gross domestic product (GDP)

TEGDS　=　total energy expenditures as percent of current-dollar GDP

Associated with each variable name is the geographic identification. Geographic areas used in SEDS are the 50 states and the District of Columbia (represented by the U.S. Postal Service state abbreviations) and the United States as a whole. Throughout this report, the term "state" includes District of Columbia.

The geographic area codes used in SEDS are shown in Table TN1.1.

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