This section describes the common data identification codes used in the State Energy Data System (SEDS). Sections 2 through 5, one for each fossil fuel energy source and total energy, provide: descriptions of all SEDS data series, including all of the intermediate variable codes; and the SEDS formulas used to estimate additional data series.

The energy indicators technical notes provide the resident population data used in per capita calculations and gross domestic product (GDP) data used to calculate total energy CO_2 emissions per dollar of GDP. Appendix A is an alphabetical listing of all the variable names and formulas used in CO_2 emissions estimation.

There are thousands of 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, CLICE is the identifying code for data on coal CO_2 emissions for the industrial sector in million metric tons:
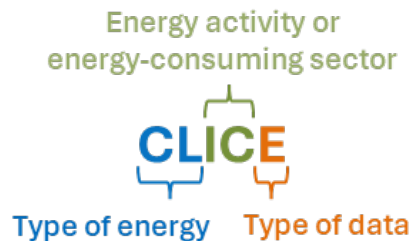
The first two characters in the SEDS CO_2 emissions variable names usually represent energy sources and products:

AB	=	aviation gasoline blending components
AR	=	asphalt and road oil
AV	=	aviation gasoline
BQ	=	normal butane
BY	=	butylene
CC	=	coal coke net imports (U.S. only)
CL	=	coal
CO	=	crude oil, including lease condensate
DM	=	distillate fuel oil, excluding biofuels

EQ	=	ethane
EY	=	ethylene
FF	=	fossil fuels
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
IQ	=	isobutane
IY	=	isobutylene
JF	=	jet fuel
KS	=	kerosene
LG	=	liquefied petroleum gases (LPG)
LU	=	lubricants
MB	=	motor gasoline blending components
MM	=	motor gasoline, excluding fuel ethanol
MS	=	miscellaneous petroleum products
NA	=	natural gasoline/isopentane (historical)
NN	=	natural gas, excluding supplemental gaseous fuels
OM	=	other petroleum products, excluding biofuels
PC	=	petroleum coke
PL	=	plant condensate (historical)
PM	=	all petroleum products, excluding biofuels
PP	=	natural gasoline
PQ	=	propane
PY	=	propylene
RF	=	residual fuel oil
SG	=	still gas
SN	=	special naphthas
TE	=	total energy
UO	=	unfinished oils
US	=	unfractionated streams (historical)
WX	=	waxes

The third and fourth characters in the SEDS variable names have several meanings and some are specific to only certain energy sources, but usually represent the energy-consuming sectors:

AC	=	transportation sector
CC	=	commercial sector

EI	=	electric power sector
IC	=	industrial sector
RC	=	residential sector
TC	=	total (all sectors)

Other third and fourth characters in the SEDS variable names represent fuel-specific activities:

KC	=	coke plants (coking coal) within the industrial sector
NF	=	non-combustion (nonfuel) use of fossil fuels
NI	=	net imports (U.S. industrial sector coal coke only)
OC	=	other than coal coke plants within the industrial sector
SQ	=	nonfuel carbon sequestration factor

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

B	=	energy consumption in British thermal units (Btu)
E	=	CO_2 emissions in metric tons
F	=	CO_2 emissions factor in million metric tons CO_2 per quadrillion Btu
S	=	share (number between 0 and 1)

There are a few special variables that do not follow the conventions above, such as:

CDEGR	=	carbon intensity of the economy (CO_2 emissions divided by real GDP);
CDTCR	=	carbon intensity of energy supply (CO_2 emissions divided by total energy consumption less interstate flow of electricity);
CDTPR	=	per capita energy-related CO_2 emissions;
ELISB	=	net interstate flow of electricity and associated losses (negative indicates flow out of state);
GDPRX	=	real gross domestic product (GDP); and
TPOPP	=	resident population including Armed Forces.

Throughout the technical notes, SEDS often describes the variables with a two-character geographic identification attached to them (ZZ). 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. In SEDS, the term "state" includes the District of Columbia. SEDS calculates some estimates of electricity sales and losses using only the contiguous 48 states and the District of Columbia, and the variables used in those calculations are identified by "48."