SEDS data file and table variables

Consumption estimates

The State Energy Data System (SEDS) publishes a complete set of annual state-level energy estimates in PDF and HTML tables on the SEDS complete website. SEDS also provides the data in various Excel, CSV, and zip files, including some variables that are not published in the tables. See the consumption technical notes for the sources and methods used to estimate SEDS energy consumption.

This document lists the SEDS variables (called MSNs) used in each published table and in the data files. See Section 1 of the SEDS technical notes for explanation of the five-character MSN code descriptions and the codes and descriptions file for definitions of the published MSN variables.

There are three Excel, CSV, and zip files that contain estimates for all states and years in cross-tabulation format. Consumption in physical units contains the consumption estimates in physical units and energy indicators, consumption in Btu contains the consumption estimates in billion British thermal units (Btu) and energy indicators, and thermal conversion factors contains all of the varying conversion factors used to convert data between physical units and Btu. In addition, there is a CSV file for each state, named with the two-letter U.S. Postal Code, as well as a file for the United States.

The first row in each file serves as a column heading and contains information about the data in each of the following records. Each data file record that follows begins with the data_status (5 characters, identifying the year of the data cycle plus an "F" that denotes "final"), followed by the state code (2 characters), the MSN code identifier, and the values for the years 1960 through 2024.

Consumption estimates contained in these Excel, CSV, and zip files are generally rounded to whole numbers. Conversion factors and ratios are usually rounded to a few decimal places. The precision does not necessarily reflect the statistical accuracy of the numbers.

The data files contain additional data series not shown in the report tables that have frequently been requested by customers. For example, the additional data include the individual "Other petroleum products" used in the industrial sector, as shown in Appendix B of this documentation.

In addition to the cross-tabulation CSV files, there is a large consolidated data file containing over 2.5 million records of the complete set of SEDS energy production, consumption, prices, expenditures, indicators, and carbon dioxide emissions from energy consumption. Users can download the zip file or the CSV file for further processing.

The following appendices show the specific data series shown in the SEDS tables and the individual petroleum products included in "Other petroleum."

List of appendices	
A	List of MSN codes shown in tables
B	Other petroleum

Contacts:

The State Energy Data System tables were prepared by the Integrated Statistics Team of the Office of Integrated Analysis and Statistics, U.S. Energy Information Administration. Questions concerning the contents of the State Energy Data System or these files may be referred to Mickey Francis, (202) 586-0525, or eiainfoUSstates@eia.gov.

Appendix A

The following section lists the SEDS variables in the order they appear in the SEDS consumption tables. Each table column contains one variable.

Summary tables:

Table C1 Energy consumption overview: estimates by energy source and end-use sector						
TETCB	CLTCB	NNTCB	PMTCB	FFTCB	NUETB	RETCB
ELISB	ELNIB	TERCB	TECCB	TEICB	TEACB	

Table C2 Energy consumption estimates for selected energy sources in physical units							
CLTCP	NGTCP	DFTCP	HLTCP	JFTCP	MGTCP	RFTCP	P1TCP
PATCP	NUETP	HYTCP	WYTCP	ENTCP	BDTCP	B1TCP	

Table C3 Primary energy consumption estimates						
CLTCB	NNTCB	DMTCB	HLTCB	JFTCB	MMTCB	RFTCB
P1TCB	PMTCB	FFTCB	NGTCB	DFTCB	MGTCB	

Table C3 Primary energy consumption estimates (continued)							
NUETB	HYTCB	WWTCB	EMTCB	BDTCB	B1TCB	BFLCB	BMTCB
GETCB	SOTCB	WYTCB	RETCB	ELISB	ELNIB	TETCB	

Table C4 Total end-use sector energy consumption estimates								
CLTXB	NGTXB	DFTXB	HLTXB	JFTXB	MGTXB	RFTXB	P1TXB	PATXB
HYTXB	WWTXB	BFLCB	GETXB	SOTXB	ESTXB	TNTCB	LOTXB	TETXB

Table C5 Residential sector energy consumption estimates						
CLRCB	NGRCB	DFRCB	HLRCB	KSRCB	PARCB	WDRCB
GERCB	SORCB	ESRCB	TNRCB	LORCB	TERCB	

Table C6 Commercial sector energy consumption estimates							
CLCCB	NGCCB	DFCCB	HLCCB	KSCCB	MGCCB	RFCCB	PACCB
HYCCB	WWCCB	GECCB	SOCCB	ESCCB	TNCCB	LOCCB	TECCB

Table C7 Industrial sector energy consumption estimates								
CLICB	NGICB	DFICB	HLICB	MGICB	RFICB	P1ICB	PAICB	HYICB
WWICB	BFLCB	GEICB	SOICB	ESICB	TNICB	LOICB	TEICB	

Table C8 Transportation sector energy consumption estimates						
CLACB	NGACB	AVACB	DFACB	HLACB	JFACB	LUACB
MGACB	RFACB	PAACB	ESACB	TNACB	LOACB	TEACB

Table C9 Electric power sector energy consumption estimates						
CLEIB	NGEIB	DKEIB	PCEIB	RFEIB	PAEIB	NUEGB
HYEGB	WWEIB	GEEGB	SOEGB	WYEGB	ELNIB	TEEIB

Ranking tables:

Table C10 Total energy consumption estimates, real gross domestic product (GDP), energy consumption estimates per real dollar of GDP		
TETCB	GDPRX	TETGR

Table C11 Total energy consumption estimates by end-use sector				
TERCB	TECCB	TEICB	TEACB	TETCB

Table C12 Primary energy consumption estimates by source				
CLTCB	NNTCB	PMTCB	NUEGB	RETCB

Table C13 Renewable energy consumption estimates by source				
BMTCB	GETCB	HYTCB	SOTCB	WYTCB

Table C14 Total energy consumption estimates per capita by end-use sector				
TERPB	TECPB	TEIPB	TEAPB	TETPB

Table C15 Petroleum consumption estimates, total and per capita			
PATCP	PATPP	PATCB	PATPB

Table C16 Natural gas consumption estimates, total and per capita			
NGTCP	NGTPP	NGTCB	NGTPB

Table C17 Electricity sales to ultimate customers, total and residential, total and per capita			
ESTCP	ESTPP	ESRCP	ESRPP

Time series tables:

Table CT1 Energy consumption estimates for selected energy sources in physical units					
CLTCP	CCNIP*	NGTCP	DFTCP	HLTCP	JFTCP
MGTCP	RFTCP	P1TCP	PATCP	NUETP	HYTCP
WYTCP	ENTCP	BDTCP	B1TCP		

Table CT2 Primary energy consumption estimates						
CLTCB	CCNIB*	NNTCB	DMTCB	HLTCB	JFTCB	MMTCB
RFTCB	P1TCB	PMTCB	FFTCB	NGTCB	DFTCB	MGTCB

Table CT2 Primary energy consumption estimates (continued)							
NUETB	HYTCB	WWTCB	EMTCB	BDTCB	B1TCB	BFLCB	BMTCB
GETCB	SOTCB	WYTCB	RETCB	ELISB**	ELNIB	TETCB	

Table CT3 Total end-use sector energy consumption estimates						
CLTXP/B	CCNIP/B*	NGTXP/B	DFTXP/B	HLTXP/B	JFTXP/B	MGTXP/B
RFTXP/B	P1TXP/B	PATXP/B	HYTXP/B	WWTXB	BFLCB	GETXB
SOTXB	ESTXP/B	TNTCB	LOTXB	TETXB		

Table CT4 Residential sector energy consumption estimates						
CLRCP/B	NGRCP/B	DFRCP/B	HLRCP/B	KSRCP/B	PARCP/B	WDRCP/B
GERCB	SORCB	ESRCP/B	TNRCB	LORCB	TERCB	

Table CT5 Commercial sector energy consumption estimates							
CLCCP/B	NGCCP/B	DFCCP/B	HLCCP/B	KSCCP/B	MGCCP/B	RFCCP/B	PACCP/B
HYCCP/B	WWCCB	GECCB	SOCCP/B	ESCCP/B	TNCCB	LOCCB	TECCB

Table CT6 Industrial sector energy consumption estimates								
CLICP/B	CCNIP/B*	NGICP/B	DFICP/B	HLICP/B	MGICP/B	RFICP/B	P1ICP/B	PAICP/B
HYICP/B	WWICB	BFLCB	GEICB	SOICP/B	ESICP/B	TNICB	LOICB	TEICB

Table CT7 Transportation sector energy consumption estimates						
CLACP/B	NGACP/B	AVACP/B	DFACP/B	HLACP/B	JFACP/B	LUACP/B
MGACP/B	RFACP/B	PAACP/B	ESACP/B	TNACB	LOACB	TEACB

Table CT8 Electric power sector energy consumption estimates						
CLEIP/B	NGEIP/B	DKEIP/B	PCEIP/B	RFEIP/B	PAEIP/B	NUEGP/B
HYEGP/B	WWEIB	GEEGP/B	SOEGP/B	WYEGP/B	ELNIP/B	TEEIB

*Appears only in U.S. tables
**Appears only in state tables

Consumption technical notes appendix tables:

Table B1							
DFTCKUS	HLICKUS	HLTCKUS	MGTCKUS	PATCKUS	FFETKUS	NUETKUS	ESTCKUS

Tables B2, B3:	NGEIK
Tables B4, B5:	NGTXK
Tables B6, B7:	NGTCK
Tables B8, B9:	CLHCK
Tables B10, B11:	CLOCK
Tables B12, B13:	CLEIK
Tables B14, B15:	HLICK
Tables B16, B17:	HLTCK

Appendix B

Other petroleum

In the total energy, total end-use, and industrial sector tables, “Other petroleum” includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke, and “other petroleum products” as described in Section 4 of the consumption technical notes. Data for the detailed products are available in the CSV file.

The following lists the components of “Other petroleum,” the fifth character is either “P” for physical units, or “B” for Btu.

Components of P1TCP/B
ARTCP/B
AVTCP/B
KSTCP/B
LUTCP/B
PCTCP/B
OPTCP/B, which includes:
ABICP/B
BXSUP/B
COICP/B
FNICP/B

FOICP/B
FSICP/B
MBICP/B
MSICP/B
SGICP/B
SNICP/B
UOICP/B
WXICP/B

Components of P1TXP/B
ARTXP/B
AVTXP/B
KSTXP/B
LUTXP/B
PCTXP/B
OPTXP/B, which includes:
ABICP/B
BXSUP/B
COICP/B
FNICP/B
FOICP/B
FSICP/B
MBICP/B
MSICP/B
SGICP/B
SNICP/B
UOICP/B
WXICP/B

Components of P1ICP/B
ARICP/B
KSICP/B
LUICP/B
PCICP/B
OPICP/B, which includes:
ABICP/B
COICP/B
FNICP/B
FOICP/B
FSICP/B
MBICP/B
MSICP/B
SGICP/B
SNICP/B
UOICP/B
WXICP/B