Appendix C. Data and methodology changes

Tables and data files in the State Energy Data System (SEDS) supply a new year of data each production cycle. The latest data may be preliminary and, therefore, revised the following cycle. Changes made to consumption and price source data for historical years are also regularly incorporated into SEDS.

Listed below are changes in SEDS contents beyond the standard updates.

Petroleum

Aviation gasoline

For 2022 forward, SEDS changes the method for estimating U.S.-level aviation gasoline prices and state-level aviation gasoline consumption. EIA suspended its survey EIA-782 and *Prime Supplier Report* after data year 2021 that provided prices to end users and prime supplier sales volumes. To estimate U.S.-level prices, SEDS uses regression models with historical SEDS U.S. aviation gasoline price estimates as the dependent variable and EIA's U.S. premium gasoline retail prices and Refinitiv's U.S. crude oil spot prices as the independent variables. SEDS assigns all states the same annual U.S. price. To estimate state-level consumption, SEDS allocates U.S. aviation gasoline product supplied to the states using the 2021 state shares. See the SEDS technical notes for more information.

Distillate fuel oil

For 2022 forward, SEDS changes the method for estimating state-level distillate fuel oil prices in the commercial and industrial sectors. EIA suspended its survey EIA-782 after data year 2021 that provided prices to end users. To estimate state-level prices by sector, SEDS uses regression models with historical SEDS state distillate fuel oil prices as the dependent variables and a combination of a few independent variables, depending on the state's location and sector that include: Refinitiv's Chicago Ultra-Low Sulfur No. 2 Diesel (ULSD) spot price (not re-published by EIA), Refinitiv's U.S. Gulf Coast ULSD spot price, Refinitiv's Los Angeles ULSD CARB spot price, Refinitiv's New York Harbor ULSD spot price, and the EIA-923 U.S. cost of distillate fuel receipts at electric generating plants. See the SEDS technical notes for more information.

Hydrocarbon gas liquids (HGL)

For 2017 forward (commercial and industrial sectors) and for 2022 forward (transportation sector), SEDS changes the method for estimating state-level propane prices. EIA suspended its survey EIA-782 after data year 2021 that provided prices to end users. To estimate state-level prices in the commercial and industrial sectors, SEDS uses historical state prices from SEDS, Refinitiv's Mont Belvieu, TX propane spot prices, and the U.S. Department of Labor, Bureau of Labor Statistics annual Consumer Price Index (CPI) inflation rate. To estimate state-level prices in the transportation sector, SEDS uses state-level linear regression models with historical SEDS state propane price estimates as the dependent variables and annual average EIA-877 U.S. propane wholesale/resale prices and Refinitiv's Mont Belvieu, TX propane spot prices as the independent variables. See the SEDS technical notes for more information.

Jet fuel

For 2022 forward, SEDS changes the method for estimating state-level jet fuel prices. EIA suspended its survey EIA-782 after data year 2021 that provided prices to end users. To estimate state-level prices, SEDS uses state-level linear regression models with historical SEDS state jet fuel price estimates as the dependent variables and Refinitiv's U.S. jet fuel spot prices as the independent variable. See the SEDS technical notes for more information.

Kerosene

For 2022 forward, SEDS changes the method for estimating state-level kerosene prices for the residential, commercial, and industrial sectors. EIA suspended its survey EIA-782 after data year 2021 that provided prices to end users. To estimate state-level prices by sector, SEDS uses regression models with historical SEDS state kerosene prices as the dependent variables and EIA's annual average U.S. No. 2 heating oil residential prices, NYSERDA's New York "statewide" retail kerosene prices, and Refinitiv's U.S. crude oil spot prices as the independent variables. See the SEDS technical notes for more information.

Residual fuel oil

For 2022 forward, SEDS changes the method for estimating state-level

residual fuel oil prices for the commercial, industrial, and transportation sectors. EIA suspended its survey EIA-782 after data year 2021 that provided prices to end users. To estimate state-level prices by sector, SEDS uses regression models with historical SEDS state residual fuel oil prices as the dependent variables and a combination of a few independent variables depending on the sector that include: EIA's U.S. No. 2 diesel retail prices, EIA's U.S. cost of residual fuel receipts at electric generating plants, Refinitiv's U.S. crude oil spot prices, and Refinitiv's U.S. Gulf Coast Ultra-Low Sulfur No. 2 diesel spot prices as independent variables. See the SEDS technical notes for more information.

Total energy and energy indicators

Capacity factors and usage factors

State data are available in SEDS for capacity factors (2008 forward) and usage factors (2013 forward). The SEDS capacity factors and usage factors data are a total for all sectors, including the electric power, commercial, and industrial sectors, and include any utility-scale combined-heat-and-power (CHP) units, for the year in thousand kilowatts. The data are from EIA's Form EIA-860 and Form EIA-923. For more information, see energy indicators technical notes.

Electric vehicle charging infrastructure

State data are available in SEDS for electric vehicle (EV) charging infrastructure for 2015 forward. The data are for non-single-family residential EV charging locations and include breakouts of the number of private vs. public and networked vs. non-networked locations, and number of Level 1, Level 2, DC fast, and Legacy charging ports at the end of the calendar year. The data are from the U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy Alternative Fuels Data Center (AFDC) and National Renewable Energy Laboratory (NREL). For more information, see energy indicators technical notes.

Electric vehicle electricity consumption

State data are available in SEDS for estimated electric vehicle (EV) electricity consumption for 2018 forward. These estimates are based on experimental models and subject to model error. The estimates are for total electricity consumption, a sub-set of EIA's electricity sales to ultimate customers data, for on-road, light-duty (less than or equal to 8,500 pounds) battery electric vehicles (BEV), plug-in hybrid electric vehicles (PHEV), and total EVs only. EIA does not separately estimate sector-level EV consumption data. The experimental estimates come from unpublished data in EIA's *Electric Power Monthly* (EPM). For more information, see the EPM technical documentation and SEDS technical notes.

Electric vehicle stocks

State data are available in SEDS for electric vehicle (EV) stocks for 2016 forward. The SEDS EV stocks data are for the number of registered light-duty vehicles at the end of the calendar year, including breakouts for battery electric vehicles (BEV), plug-in hybrid electric vehicles (PHEV), total EVs, and total (all fuels) light-duty vehicles. The U.S.-level data are from S&P Global Mobility Vehicles in Operation, except the 2017 data that are estimates interpolated by EIA. The state-level estimates use state shares from the U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy Alternative Fuels Data Center (AFDC) to allocate the U.S.-level data to the states. For more information, see see energy indicators technical notes.

Gross domestic product

Revised real and current-dollar gross domestic product (GDP) data by state are available in SEDS for 1997 forward. The data are for all industries total from the U.S. Bureau of Economic Analysis (BEA), which released comprehensive revisions for all state GDP data for 1997 forward in May 2024, including a change in real dollar units to 2017 chained dollars. For more information, see the SEDS technical notes.