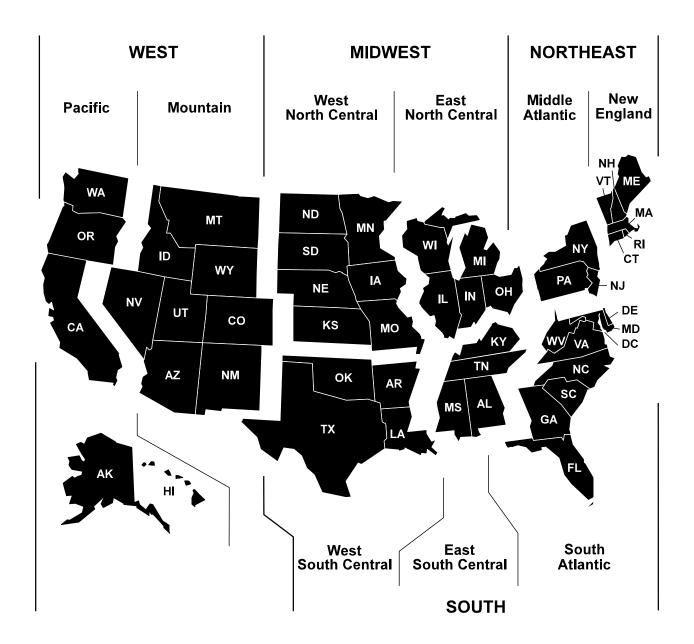
Appendix E

U.S. Census Regions and Divisions

Appendix E

U.S. Census Regions and Divisions



Source: U.S. Department of Commerce, Bureau of the Census, *Statistical Abstract of the United States*, 1996 (Washington, DC, October 1996), Figure 1.

Appendix F

Descriptions of Major Industrial Groups and Selected Industries

Appendix F

Descriptions of Major Industrial Groups and Selected Industries

This appendix contains descriptions of industrial groups and selected industries taken from the Standard Industrial Classification Manual, 1987 (SIC).⁵⁴ This appendix includes descriptions of the 30 groups that comprise the strata of the Manufacturing Energy Consumption Survey. These are the 20 major industrial groups (two-digit SIC) and the 10 major energy-consuming industries (four-digit SIC). The Standard Industrial Classification system is described in Appendix B.

SIC 20—Food and Kindred Products: This major group includes establishments manufacturing foods and beverages for human consumption and certain related products such as manufactured ice, chewing gum, vegetable and animal fats and oils, and prepared feeds for animals and fowls.

SIC 2011—**Meat Packing Plants:** Establishments primarily engaged in the slaughtering, for their own account or on a contract basis for the trade, of cattle, hogs, sheep, lambs, and calves for meat to be sold or to be used on the same premises in canning, cooking, curing, and freezing, and in making sausage, lard, and other products.

SIC 2033—Canned Fruits and Vegetables: Establishments primarily engaged in canning fruits, vegetables, and fruit and vegetable juices: and in manufacturing catsup and similar tomato sauces or natural and imitation preserves, jams, and jellies.

SIC 2037—Frozen Fruits and Vegetables: Establishments primarily engaged in freezing fruits, fruit juices, and vegetables. These establishments also produce important byproducts such as fresh or dried citrus pulp.

SIC 2046—Wet Corn Milling: Establishments primarily engaged in milling corn or sorghum grain (milo) by the wet process, and producing starch, syrup, oil, sugar, and byproducts such as gluten feed and meal. Also included in this industry are establishments primarily engaged in manufacturing starch from other vegetable sources (e.g., potatoes, wheat).

SIC 2051—Bread, Cake and Related Products: Establishments primarily engaged in manufacturing fresh or frozen bread and bread-type rolls and fresh cakes, pies, pastries and other similar "perishable" bakery products.

SIC 2061—Cane Sugar, Except Refining: Establishments primarily engaged in manufacturing raw sugar, syrup, or finished (granulated or clarified) cane sugar from sugarcane. Establishments primarily engaged in refining sugar from purchased raw cane sugar or sugar syrup are classified in Industry 2062.

SIC 2062—Cane Sugar Refining: Establishments primarily engaged in refining purchased raw cane sugar and sugar syrup.

SIC 2063—Beet Sugar: Establishments primarily engaged in manufacturing sugar from sugar beets.

SIC 2075—Soybean Oil Mills: Establishments primarily engaged in manufacturing soybean oil, cake, and meal, and soybean protein isolates and concentrates or in processing purchased soybean oil other than into edible cooking oils.

SIC 21—Tobacco Products: This major group includes establishments engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, snuff, and reconstituted tobacco and in stemming and redrying tobacco.

SIC 22—Textile Mill Products: This major group includes establishments engaged in performing any of the following operations: (1) preparation of fiber and subsequent manufacturing of yarn, thread, braids, twine, and cordage; (2) manufacturing broadwoven fabrics, narrow woven fabrics, knit fabrics, and carpets and rugs from yarn; (3) dyeing and finishing fiber, yarn, fabrics, and knit apparel; (4) coating, waterproofing, or otherwise treating fabrics; (5) the integrated

⁵⁴Executive Office of the President, Office of Management and Budget, Standard Industrial Classification Manual, 1987, pp. 67-263.

manufacture of knit apparel and other finished articles from yarn; and (6) the manufacture of felt goods, lace goods, nonwoven fabrics, and miscellaneous textiles.

- **SIC 23—Apparel and Other Textile Products:** This major group, known as the cutting-up and needle trades, includes establishments producing clothing and fabricating products by cutting and sewing purchased woven or knit textile fabrics and related materials, such as leather, rubberized fabrics, plastics, and furs.
- **SIC 24—Lumber and Wood Products:** This major group includes establishments engaged in cutting timber and pulpwood; merchant sawmills, lath mills, shingle mills, cooperage stock mills, planing mills, and plywood and veneer mills engaged in producing lumber and wood basic materials; and establishments engaged in manufacturing finished articles made entirely or mainly of wood or related materials.
 - SIC 2421—Sawmills and Planing Mills, General: Establishments primarily engaged in sawing rough lumber and timber from logs and bolts, or resawing cants and flitches into lumber, including box lumber and softwood cut stock; planing mills combined with sawmills; and separately operated planing mills which are engaged primarily in producing surfaced lumber and standard workings or patterns of lumber. This industry includes establishments primarily engaged in sawing lath and railroad ties and in producing tobacco hogshead stock, wood chips, and snow fence lath.
 - **SIC 2436—Softwood Veneer and Plywood:** Establishments primarily engaged in producing commercial softwood veneer and plywood, from veneer produced in the same establishment or from purchased veneer.
 - **SIC 2493—Reconstituted Wood Products:** Establishments primarily engaged in manufacturing reconstituted wood products. Important products of this industry are hardboard, particleboard, insulation board, medium density fiberboard, waferboard, and oriented strandboard.
- **SIC 25—Furniture and Fixtures:** This major group includes establishments engaged in manufacturing household, office, public building, and restaurant furniture; and office and store fixtures.
 - **SIC 2511—Wood Household Furniture, Except Upholstered:** Establishments primarily engaged in manufacturing wood household furniture commonly used in dwellings. This industry also includes establishments manufacturing camp furniture.
- **SIC 26—Paper and Allied Products:** This major group includes establishments primarily engaged in the manufacture of pulps from wood and other cellulose fibers, and from rags; the manufacture of paper and paper board; and the manufacture of paper and paperboard into converted products, such as paper coated off the paper machine, paper bags, paper boxes, and envelopes.
 - **SIC 2611—Pulp Mills:** Establishments primarily engaged in manufacturing pulp from wood or from other materials, such as rags, linters, wastepaper, and straw.
 - **SIC 2621—Paper Mills:** Establishments primarily engaged in manufacturing paper from wood pulp and other fiber pulp, and which may also manufacture converted paper products.
 - **SIC 2631—Paperboard Mills:** Establishments primarily engaged in manufacturing paperboard, including paperboard coated on the paperboard machine, from wood pulp and other fiber pulp.
- **SIC 27—Printing and Publishing:** This major group includes establishments engaged in printing by one or more common processes, such as letterpress, lithography (including offset), gravure, or screen; and those establishments which perform services for the printing trade, such as bookbinding and platemaking.
- SIC 28—Chemicals and Allied Products: This major group includes establishments producing basic chemicals, and establishments manufacturing products by predominantly chemical processes. Establishments classified in this major group manufacture three general classes of products: (1) basic chemicals, such as acids, alkalies, salts, and organic chemicals; (2) chemical products to be used in further manufacture, such as synthetic fibers, plastics materials, dry colors, and pigments; and (3) finished chemical products to be used for ultimate consumption, such as drugs, cosmetics, and soaps; or to be used as materials or supplies in other industries, such as paints, fertilizers, and explosives.

- SIC 2812—Alkalies and Chlorine: Establishments primarily engaged in manufacturing alkalies and chlorine.
- **SIC 2813—Industrial Gases:** Establishments primarily engaged in manufacturing industrial gases (including organic) for sale in compressed, liquid, and solid forms.
- **SIC 2816—Inorganic Pigments:** Establishments primarily engaged in manufacturing inorganic pigments. Important products of this industry include black pigments, except carbon black, white pigments, and color pigments.
- SIC 2819—Industrial Inorganic Chemicals, Not Elsewhere Classified: Establishments primarily engaged in manufacturing industrial organic chemicals, excluding alkalies and chlorine, industrial gases, and inorganic pigments.
- **SIC 2821—Plastics Materials and Resins:** Establishments primarily engaged in manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers.
- **SIC 2822—Synthetic Rubber:** Establishments primarily engaged in manufacturing synthetic rubber by polymerization or copolymerization. An elastomer for the purpose of this classification is a rubber-like material capable of vulcanization, such as copolymers of butadiene and styrene, or butadiene and acrylonitrile, polybutadienes, chloroprene rubbers, and isobutylene-isoprene copolymers.
- **SIC 2823—Cellulosic Manmade Fibers:** Establishments primarily engaged in manufacturing cellulosic fibers (including cellulose acetate and regenerated cellulose such as rayon by the viscose or cuprammonium process) in the form of monofilament, yarn, staple, or tow suitable for further manufacturing on spindles, looms, knitting machines, or other textile processing equipment.
- **SIC 2824—Organic Fibers, Noncellulosic:** Establishments primarily engaged in manufacturing manmade organic fibers, except cellulosic (including those of regenerated proteins, and of polymers or copolymers of such components as vinyl chloride, vinylidene chloride, linear esters, vinyl alcohols, acrylonitrile, ethylenes, amides, and related polymeric materials), in the form of monofilament, yarn, staple, or tow suitable for further manufacturing on spindles, looms, knitting machines, or other textile processing equipment.
- **SIC 2861—Gum and Wood Chemicals:** Establishments primarily engaged in manufacturing hardwood and softwood distillation products, wood and gum naval stores, charcoal, natural dyestuffs, and natural tanning materials.
- **SIC 2865—Cyclic Crudes and Intermediates:** Establishments primarily engaged in manufacturing cyclic organic crudes and intermediates, and organic dyes and pigments. Important products of this industry include: (1) aromatic chemicals, such as benzene, toluene, mixed xylenes naphthalene; (2) synthetic organic dyes; and (3) synthetic organic pigments.
- **SIC 2869—Industrial Organic Chemicals, Not Elsewhere Classified:** Establishments primarily engaged in manufacturing industrial organic chemicals, excluding gum and wood chemicals, and cyclic organic crudes and intermediates, and organic dyes and pigments.
- **SIC 2873—Nitrogenous Fertilizers:** Establishments primarily engaged in manufacturing nitrogenous fertilizer materials or mixed fertilizers from nitrogenous materials produced in the same establishment.
- **SIC 2874—Phosphatic Fertilizers:** Establishments primarily engaged in manufacturing phosphatic fertilizer materials, or mixed fertilizers from phosphatic materials produced in the same establishment.
- **SIC 2895—Carbon Black:** Establishments primarily engaged in manufacturing carbon black (channel and furnace black).
- **SIC 29—Petroleum Refining and Related Industries:** This major group includes establishments primarily engaged in petroleum refining, manufacturing paving and roofing materials, and compounding lubricating oils and greases from purchased materials.
 - **SIC 2911—Petroleum Refining:** Establishments primarily engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, and lubricants, through fractionation or straight distillation of crude oil, redistillation of unfinished petroleum derivatives, cracking or other processes.

- **SIC 30—Rubber and Miscellaneous Plastics Products:** This major group includes establishments manufacturing products, not elsewhere classified, from plastics, resins, and from natural, synthetic, or reclaimed rubber, gutta percha, balata, or gutta siak.
 - **SIC 3011—Tires and Inner Tubes:** Establishments primarily engaged in manufacturing pneumatic casings, inner tubes, and solid and cushion tires for all types of vehicles, airplanes, farm equipment, and children's vehicles; tiring; camelback; and tire repair and retreading materials.
 - SIC 308—Miscellaneous Plastics Products Not Elsewhere Classified: Establishments primarily engaged in manufacturing (1) unsupported plastics film and sheet from purchased resins or from resins produced in the same plant; (2) unsupported plastics profiles, rods, tubes, and other shapes; (3) laminated plastics plate, sheet, profiles, rods, and tubes; (4) plastics pipe; (5) plastics bottles; (6) custom compounding of purchased plastics resins; (7) plastics plumbing fixtures; and (8) plastics products not elsewhere classified.
- **SIC 31—Leather and Leather Products:** This major group includes establishments engaged in tanning, currying, and finishing hides and skins, leather converters, and establishments manufacturing finished leather and artificial leather products and some similar products made of other materials.
- SIC 32—Stone, Clay, Glass, and Concrete Products: This major group includes establishments manufacturing flat glass and other glass products, cement, structural clay products, pottery, concrete and gypsum products, cut stone, abrasive and asbestos products, and other products from materials taken principally from the earth in the form of stone, clay, and sand.
 - **SIC 3211—Flat Glass:** Establishments primarily engaged in manufacturing flat glass. This industry also produces laminated glass, but establishments primarily engaged in manufacturing laminated glass from purchased flat glass are not included.
 - **SIC 3221—Class Containers:** Establishments primarily engaged in manufacturing glass containers for commercial packing and bottling, and for home canning.
 - **SIC 3229—Pressed and Blown Glass and Glassware, Not Elsewhere Classified:** Establishments primarily engaged in manufacturing glass and glassware, not elsewhere classified, pressed, blown, or shaped from glass produced in the same establishment. Establishments primarily engaged in manufacturing textile glass fibers are also included in this industry. Establishments primarily engaged in the production of pressed lenses for vehicular lighting, beacons, and lanterns are also included in this industry.
 - **SIC 3241—Cement, Hydraulic:** Establishments primarily engaged in manufacturing hydraulic cement, including portland, natural, masonry, and pozzolana cements.
 - **SIC 3274—Lime:** Establishments primarily engaged in manufacturing quicklime, hydrated lime, and "dead-burned" dolomite from limestone, dolomite shells, or other substances.
 - **SIC 3296—Mineral Wool:** Establishments primarily engaged in manufacturing mineral wool and mineral wool insulation products made of such siliceous materials as rock, slag and glass, or combinations thereof.
- **SIC 33—Primary Metal Industries:** This major group includes establishments engaged in smelting and refining ferrous and nonferrous metals from ore, pig, or scrap; in rolling, drawing, and alloying metals; in manufacturing castings and other basic metal products; and in manufacturing nails, spikes, and insulated wire and cable.
 - SIC 331—Blast Furnace and Basic Steel Products Not Elsewhere Classified: Establishments primarily engaged in (1) manufacturing hot metal, pig iron, and silvery pig iron from iron ore and iron and steel scrap; converting pig iron, scrap iron, and scrap steel into steel; and in hot-rolling iron and steel into basic shapes, such as plates, sheets, strips, rods, bars, and tubing; (2) manufacturing ferro and nonferrous metal additive alloys by electrometallurgical or metallothermic processes, including high percentage ferroalloys and high percentage nonferrous additive alloys; (3) drawing wire from purchased iron or steel rods, bars or wire and manufacturing products made from wire such as steel nails and spikes; (4) cold-rolling steel sheets and strip from purchased hot-rolled sheets, cold-drawing steel bars and steel shapes from purchased hot-rolled steel bars, and producing other cold finished steel; (5) producing welded or

seamless steel pipe and tubes and heavy riveted steel pipe from purchased materials; and (6) steel products not elsewhere classified.

- SIC 3312—Steel Works, Blast Furnaces (Including Coke Ovens), and Rolling Mills: Establishments primarily engaged in manufacturing hot metal, pig iron, and silvery pig iron from iron ore and iron and steel scrap; converting pig iron, scrap iron, and scrap steel into steel; and in hot-rolling iron and steel into basic shapes, such as plates, sheets, strips, rods, bars, and tubing.
- **SIC 3313—Electrometallurgical Products:** Establishments primarily engaged in manufacturing ferrous and nonferrous metal additive alloys by electrometallurgical or metallothermic processes, including high percentage ferroalloys and high percentage nonferrous additive alloys.
- **SIC 3321—Gray and Ductile Iron Foundries:** Establishments primarily engaged in manufacturing gray and ductile iron castings, including cast iron pressure and soil pipes and fittings.
- **SIC 3331—Primary Copper:** Establishments primarily engaged in smelting copper from the ore, and in refining copper by electrolytic or other processes.
- **SIC 3334—Primary Production of Aluminum:** Establishments primarily engaged in producing aluminum from alumina and in refining aluminum by any process.
- **SIC 3339—Primary Nonferrous Metals, Not Elsewhere Classified:** Establishments primarily engaged in smelting and refining nonferrous metals, except copper and aluminum.
- SIC 3353—Aluminum Sheet, Plate, and Foil: Establishments primarily engaged in flat rolling aluminum and aluminum-base alloy basic shapes, such as sheet, plate, and foil, including establishments producing welded tube.
- **SIC 34—Fabricated Metal Products:** This major group includes establishments engaged in fabricating ferrous and nonferrous metal products such as metal cans, tinware, handtools, cutlery, general hardware, nonelectric heating apparatus, fabricated structural metal products, metal forgings, metal stampings, ordnance (except vehicles and guided missiles), and a variety of metal and wire products, not elsewhere classified.
- **SIC 35—Industrial Machinery and Equipment:** This major group includes establishments engaged in manufacturing industrial and commercial machinery and equipment and computers.
 - **SIC 357—Computer and Office Equipment:** Establishments primarily engaged in manufacturing electronic computers; computer storage devices; computer terminals; point-of-sale devices; funds transfer devices and other calculating and accounting machines; and office machines and devices not elsewhere classified, including typewriters and word processing equipment.
- **SIC 36—Electronic and Other Electric Equipment:** This major group includes establishments engaged in manufacturing machinery, apparatus, and supplies for the generation, storage, transmission, transformation, and utilization of electrical energy.
- **SIC 37—Transportation Equipment:** This major group includes establishments engaged in manufacturing equipment for transportation of passengers and cargo by land, air, and water.
 - **SIC 3711—Motor Vehicles and Car Bodies:** Establishments primarily engaged in manufacturing or assembling complete passenger automobiles, trucks, commercial cars and buses, and special purpose motor vehicles which are for highway use. This industry also includes establishments primarily engaged in manufacturing chassis and passenger car bodies.
 - **SIC 3714—Motor Vehicle Parts and Accessories:** Establishments primarily engaged in manufacturing motor vehicle parts and accessories, but not engaged in manufacturing complete motor vehicles or passenger car bodies.
- **SIC 38—Instruments and Related Products:** This major group includes establishments engaged in manufacturing instruments (including professional and scientific) for measuring, testing, analyzing, and controlling, and their associated

sensors and accessories; optical instruments and lenses; surveying and drafting instruments; hydrological, hydrographic, meteorological, and geophysical equipment; search, detection, navigation, and guidance systems and equipment; surgical, medical, and dental instruments, equipment and supplies; ophthalmic goods; photographic equipment and supplies; and watches and clocks.

SIC 39—Miscellaneous Manufacturing Industries: This major group includes establishments primarily engaged in manufacturing products not classified in any other major group.

Appendix G

Metric Conversion Factors

Appendix G

Metric Conversion Factors

Data in the Energy Information Administration publications are expressed in units, such as British thermal units, barrels, cubic feet, and short tons, that historically have been used in the United States. However, because U.S. activities involve foreign nations, most of which use metric units of measure, the United States is committed to making the transition to the metric system. The metric conversion factors presented in Table G1 can be used to calculate the metric-unit equivalents of values expressed in U.S. units. For example, 500 short tons are the equivalent of 453.6 metric tons (500 short tons x 0.9071847 metric tons/short tons=453.6 metric tons).

Table G1. Metric Conversion Factors

Type of Unit	U.S. Unit		Conversion Factor	Metric Unit
Mass	Short Tons	Χ	0.9071847	= Metric Tons (t)
	Short Tons Uranium Oxide (U ₃ 0 ₈)	Χ	0.769	= Metric Tons Uranium (U)
	Short Tons Uranium Fluoride (UF ₆)	Χ	0.613	= Metric Tons Uranium (U)
	Long Tons	Χ	1.016	= Metric Tons(t)
	Pounds (lb)	Χ	0.45359237 ^a	= Kilograms(kg)
	Pounds Uranium Oxide (lb U ₃ O ₈)	Χ	0.384645 ^b	= Kilograms (kg)
	Ounces, Avoirdupois (oz)	Χ	28.34952	= Grams(g)
	Barrels of Oil (bbl)	Χ	0.1589873	= Cubic Meters (m³)
/olume	Cubic Yards (yd³)	Χ	0.765555	= Cubic Meters (m³)
	Cubic Feet (ft ³)	Χ	0.02831685	= Cubic Meters (m³)
	U.S. Gallons (gal)	Χ	3.785412	= Liter (L)
	Ounces, Fluid (fl oz)	Χ	29.57353	= Milliliters (ml)
	Cubic Inches (in³)	Χ	16.38706	= Milliliters (ml)
_ength	Miles (mi)	Χ	1,609344ª	= Kilometers (km)
	Yards (yd)	Χ	0.9144 ^a	= Meters (m)
	Feet (ft)	Χ	0.3048 ^a	= Meters (m)
	Inches (in)	Χ	2.54 ^a	= Centimeters (cm)
Area	Acres	Х	0.40469	= Hectares (ha)
	Square Miles (mi ²)	Χ	2,589988	Square Kilometers (km²)
	Square Yards (yd²)	Χ	0.836127 4	= Square Meters (m ²)
	Square Feet (ft²)	Χ	0.092903 04 ^a	= Square Meters (m²)
	Square Inches (in²)	Χ	6.45616 ^a	= Square Centimeters (cm²)
Temperature	Degrees Fahrenheit ^c (°F)	Χ	5/9 (after subtracting 32) ^a	= Degrees Celsius (°c)
Energy	British thermal units (Btu)	Χ	1,055.056	= Joules (J)
	Calories (cal)	Χ	4.1868	= Joules (J)
	Kilowatthours (kWh)	Χ	3.6	= Megajoules (MJ)

^aExact Conversion.

Sources: •General Services Administration, Federal Standard 376B, Preferred Metric Units for General Use by the Federal Government (Washington, DC, January 27, 1993), pp. 9-11, 13, and 16. •National Institute of Standards and Technology, Special Publications 330, 811, and 814. •American National Standards Institute/Institute of Electrical and Electronic Engineers, ANS/EEE Std.268-1982, pp. 28 and 29. •Energy Information Administration/Monthly Energy Review August 1993, Appendix B, pp. 161.

^bCalculated by the Energy Information Administration.

[°]To convert degrees Celsius (°C) to degrees Fahrenheit (°F) multiply by 9/5, then add 32.

Appendix H

Related EIA Publications on Energy Consumption

Appendix H

Related EIA Publications on Energy Consumption

For information on how to obtain the current publications, see the inside cover of this report. For information on later publications, contact the National Energy Information Center on (202) 586-8800. (Older reports, except Technical and Service Reports, are stored on microfiche via the National Technical Information Service (NTIS).)

In addition to the reports listed below, public-use data tapes and data diskettes for the residential, residential transportation, and commercial sectors are available from the National Technical Information Service (NTIS). To obtain information on how to order the tapes/diskettes, you may call NTIS at 703-487-4650, FAX number 703-321-8547. Data diskettes can also be obtained from the Office of Scientific and Technical Information (OSTI). For OSTI ordering information, call 423-576-8401. The current microdata for the various surveys can be found on the Consumption Homepage at http://www.eia.doe.gov/emeu/page1.html.

Industrial Sector

Changes in Energy Intensity in the Manufacturing Sector 1985-1991, September 1995, DOE/EIA-0552(85-91).

Manufacturing Consumption of Energy 1991, December 1994, DOE/EIA-0512(91).

"Energy Preview: Manufacturing Energy Consumption Survey Preliminary Estimates, 1991," *Monthly Energy Review*, September 1993, DOE/EIA-0035(93/01).

"Energy Efficiency in the Manufacturing Sector," Monthly Energy Review (Article), p.1, December 1992.

Manufacturing Energy Consumption Survey: Changes in Energy Intensity in the Manufacturing Sector 1980-1988, December 1991, DOE/EIA-0552(80-88).

Manufacturing Energy Consumption Survey: Manufacturing Fuel-Switching Capability 1988; September 1991, DOE/EIA-0515(88).

Manufacturing Energy Consumption Survey: Consumption of Energy, 1988; May 1991, DOE/EIA- 0512(88).

Manufacturing Energy Consumption Survey: Energy Efficiency in Manufacturing, 1985; January 1990, DOE/EIA-0516(85).

Manufacturing Energy Consumption Survey: Fuel-Switching Capability, 1985; December 1988, DOE/EIA-0515(85).

Manufacturing Energy Consumption Survey: Methodological Report, 1985; November 1988, DOE/EIA0514(85).

Manufacturing Energy Consumption Survey: Consumption of Energy, 1985; November 1988, DOE/EIA-0512(85).

"Manufacturing Sector Energy Consumption 1985 Provisional Estimates," *Monthly Energy Review* (Article), pp. vii-x, January 1987, DOE/EIA-0035 (87/01).

Report on the 1980 Manufacturing Industries' Energy Consumption Study and Survey of Large Combustors; February 1983, DOE/EIA-0358.

Industrial Energy Consumption, Survey of Large Combustors: Report on Alternate Fuel-Burning Capabilities of Large Boilers in 1979; February 1982, DOE/EIA-0304, GP.

Methodological Report of the 1980 Manufacturing Industries Survey of Large Combustors (EIA-463); March 1982, DOE/EIA-0306.

Other Publications on the Industry Sector

Energy Consumption Series—Derived Annual Estimates of Manufacturing Energy Consumption 1974-1988, August 1992, DOE/EIA-0555(92)/3.

Energy Consumption Series—Development of the 1991 Manufacturing Energy Consumption Survey, May 1992, DOE/EIA-0555(92)/2.

Residential Sector

Housing Characteristics

Note: The survey name was dropped from the beginning of the report title starting with the 1987 data reports.

Housing Characteristics, 1993; June 1995, DOE/EIA-0314(93).

Housing Characteristics 1990; May 1992, DOE/EIA-0314(90).

Housing Characteristics 1987; May 1989, DOE/EIA-0314(87).

Residential Energy Consumption Survey: Housing Characteristics 1984; October 1986, DOE/EIA-0314(84).

Residential Energy Consumption Survey: Housing Characteristics, 1982; August 1984, DOE/EIA-0314(82).

Residential Energy Consumption Survey Housing Characteristics, 1981; August 1983, DOE/EIA-0314(81).

Residential Energy Consumption Survey: Housing Characteristics, 1980; June 1982, DOE/EIA-0314.

Residential Energy Consumption Survey: Characteristics of the Housing Stock and Households, 1978; February 1980, DOE/EIA-0207/2.

Residential Energy Consumption Survey: Conservation; February 1980, DOE/EIA-0207/3.

Preliminary Conservation Tables from the National Interim Energy Consumption Survey; August 1979, DOE/EIA-0193/P.

Characteristics of the Housing Stock and Households: Preliminary Findings from the National Interim Energy Consumption Survey; October 1979, DOE/EIA-0199/P.

Consumption and Expenditures

Note: The survey name was dropped from the beginning of the report title starting with the 1987 data reports. The titles were changed to *Household Energy Consumption and Expenditures 1987, Part 1: National* and *Part 2: Regional*.

Household Energy Consumption and Expenditures 1993; October 1995, DOE/EIA-0321(93).

"Household Energy Consumption and Expenditures 1990," Monthly Energy Review, August 1993, DOE/EIA-0035(93/08).

Household Energy Consumption and Expenditures 1990; February 1993, DOE/EIA-0321/1(90).

Household Energy Consumption and Expenditures 1990\S; DOE/EIA-0321/2(90).

Household Energy Consumption and Expenditures 1987, Part 1: National Data; October 1989, DOE/EIA-0321/1(87). Note: Energy end-use data are included in this report.

Household Energy Consumption and Expenditures 1987, Part 2: Regional Data; DOE/EIA-0321/2(87).

Residential Energy Consumption Survey: Consumption and Expenditures, April 1984 Through March 1985, Part 1: National Data; March 1987, DOE/EIA-0321/1(84).

Residential Energy Consumption Survey: Consumption and Expenditures, April 1984 Through March 1985, Part 2: Regional Data; May 1987, DOE/EIA-0321/2 (84). Note: Energy end-use data are included in this report.

Residential Energy Consumption Survey: Consumption and Expenditures, April 1982 Through March 1983, Part 1: National Data; November 1984, DOE/EIA-0321/1(82).

Residential Energy Consumption Survey: Consumption and Expenditures, April 1982 Through March 1983, Part 2: Regional Data; December 1984, DOE/EIA-0321/2(82).

Residential Energy Consumption Survey: Consumption and Expenditures, April 1981 Through March 1982, Part 1: National Data; September 1983, DOE/EIA-0321/1(81).

Residential Energy Consumption Survey: Consumption and Expenditures, April 1981 Through March 1982, Part 2: Regional Data; October 1983, DOE/EIA-0321/2(81).

Residential Energy Consumption Survey: Consumption and Expenditures, April 1980 Through March 1981, Part 1: National Data; September 1982, DOE/ EIA-0321/1(80).

Residential Energy Consumption Survey: Consumption and Expenditures, April 1980 Through March 1981, Part 2: Regional Data; June 1983, DOE/EIA-0321/2(80).

Residential Energy Consumption Survey: 1979-1980 Consumption and Expenditures, Part 1: National Data (Including Conservation); April 1981, DOE/EIA-0262/1.

Residential Energy Consumption Survey: 1979-1980 Consumption and Expenditures, Part II: Regional Data; May 1981, DOE/EIA-0262/2.

Residential Energy Consumption Survey: Consumption and Expenditures, April 1978 Through March 1979; July 1980, DOE/EIA-0207/5.

Single-Family Households: Fuel Oil Inventories and Expenditures: National Interim Energy Consumption Survey; December 1979, DOE/EIA-0207/1.

Other Publications on the Residential Sector

Energy Consumption Series—Residential Energy Consumption Survey Quality Profile, March 1996, DOE/EIA-0555(96)/1.

Energy Consumption Series—Sample Design for the Residential Energy Consumption Survey, August 1994, DOE/EIA-0555(94)/1.

Energy Consumption Series—User-Needs Study of the 1993 Residential Energy Consumption Survey, September 1993, DOE/EIA-0555(93)/2.

"End-Use Consumption of Residential Energy" *Monthly Energy Review* (Article), pp. vii-xiv, July 1987, DOE/EIA-0035(87/07).

Residential Energy Consumption Survey: Trends in Consumption and Expenditures 1978-1984 June 1987, DOE/EIA-0482.

Residential Conservation Measures; July 1986, SR/EEUD/86/01.

An Economic Evaluation of Energy Conservation and Renewable Energy Tax Credits; October 1985, Service Report.

Residential Energy Consumption and Expenditures by End Use for 1978, 1980, and 1981; December 1984, DOE/EIA-0458.

Weatherization Program Evaluation, SR-EEUD- 84-1; August 1984 (available from the Office of the Assistant Secretary for Conservation and Renewable Energy, Department of Energy).

Residential Energy Consumption Survey: Regression Analysis of Energy Consumption by End Use; October 1983, DOE/EIA-0431.

National Interim Energy Consumption Survey: Exploring the Variability In Energy Consumption; July 1981, DOE/EIA-0272.

National Interim Energy Consumption Survey: Exploring the Variability in Energy Consumption--A Supplement; October 1981, DOE/EIA-0272/S.

Residential Transportation Sector

Note: The survey name was dropped from the beginning of the report title starting with the 1988 data report, and the report title changed to *Household Vehicles Energy Consumption 1988*.

Household Vehicles Energy Consumption 1994; August 1997, DOE/EIA-0464(94).

Household Vehicles Energy Consumption 1991; December 1993, DOE/EIA-0464(91).

"Energy Preview: Residential Transportation Energy Consumption Survey Preliminary Estimates, 1991," *Monthly Energy Review*, January 1993, DOE/EIA-0035(93/01).

Household Vehicles Energy Consumption 1988; February 1990, DOE/EIA-0464(88).

Residential Transportation Energy Consumption Survey: Consumption Patterns of Household Vehicles 1985; April 1987, DOE/EIA-0464(85).

Residential Transportation Energy Consumption Survey: Consumption Patterns of Household Vehicles, 1983; January 1985, DOE/EIA-0464(83).

Residential Energy Consumption Survey: Consumption Patterns of Household Vehicles, Supplement: January 1981 to September 1981; February 1983, DOE/EIA-0328.

Residential Energy Consumption Survey: Consumption Patterns of Household Vehicles, June 1979 to December 1980; April 1982, DOE/EIA-0319.

Commercial Sector

Note: The name of the Nonresidential Buildings Energy Consumption Survey was changed to the Commercial Buildings Energy Consumption Survey, beginning with the 1989 survey. The survey name was also dropped from the report title at that time and subsequently.

Characteristics of Buildings

Commercial Buildings Characteristics 1995; August 1997, DOE/EIA-E-0109, Electronic Only. This report can be accessed at www.eia.doe.gov/emeu/cbecs/cb951a.html.

Commercial Buildings Characteristics 1992; April 1994, DOE/EIA-0246(92).

"Commercial Buildings Characteristics 1992," Monthly Energy Review, January 1994, DOE/EIA-0035(94/01).

Commercial Buildings Characteristics 1989; June 1991, DOE/EIA-0246(89).

Nonresidential Buildings Energy Consumption Survey: Characteristics of Commercial Buildings, 1986; September 1988, DOE/EIA-0246(86).

Nonresidential Buildings Energy Consumption Survey: Characteristics of Commercial Buildings, 1983; July 1985, DOE/EIA-0246(83).

Nonresidential Buildings Energy Consumption Survey: Characteristics of Commercial Buildings, 1983; A Supplemental Reference, DOE/EIA-M008.

Nonresidential Buildings Energy Consumption Survey: Characteristics of Commercial Buildings, 1983; July 1985, DOE/EIA-0246(83).

Nonresidential Buildings Energy Consumption Survey: Fuel Characteristics and Conservation Practices; June 1981, DOE/EIA-0278.

Nonresidential Buildings Energy Consumption Survey: Building Characteristics; March 1981, DOE/EIA-0246.

Consumption and Expenditures

Commercial Buildings Consumption and Expenditures 1992; April 1995, DOE/EIA-0318(92).

Commercial Buildings Consumption and Expenditures 1989; April 1992, DOE/EIA-0318(89).

Nonresidential Buildings Energy Consumption Survey: Commercial Buildings Consumption and Expenditures 1986; May 1989, DOE/EIA-0318(86).

Nonresidential Buildings Energy Consumption Survey: Commercial Buildings, Consumption and Expenditures 1983; September 1986, DOE/EIA-0318(83).

Nonresidential Buildings Energy Consumption Survey: 1979 Consumption and Expenditures, Part 1: Natural Gas and Electricity; March 1983, DOE/EIA-0318/1.

Nonresidential Buildings Energy Consumption Survey: 1979 Consumption and Expenditures, Part 2: Steam, Coal, Fuel Oil, LPG, and Total Fuels; December 1983, DOE/EIA-0318(79)/2.

Other Publications on the Commercial Sector

Service Report: Federal Buildings Supplemental Survey 1993, November 1995, SR/EMEU/95-02.

Energy Consumption Series— Energy End-Use Intensities in Commercial Buildings, September 1994, DOE/EIA-0555(94)/2.

"Assessment of Energy Use in Multibuilding Facilities," Monthly Energy Review, December 1993, DOE/EIA-0035(93/12).

Energy Consumption Series—Assessment of Energy Use in Multibuilding Facilities, August 1993, DOE/EIA-0555(93)/1.

Energy Consumption Series—*User-Needs Study for the 1992 Commercial Buildings Energy Consumption Survey*, September 1992, DOE/EIA-0555(92)/4.

Energy Consumption Series—Lighting in Commercial Buildings; March 1992, DOE/EIA-0555(92)/1.

Cross-Sector

Energy Consumption Measuring Energy Efficiency in the United States' Economy: A Beginning, October 1995, DOE/EIA-0555(95)/2.

Energy Consumption Series-Buildings and Energy in the 1980's, June 1995, DOE/EIA-0555(95)/1.

Energy Consumption by End-Use Sector: A Comparison of Measures by Consumption and Supply Surveys; April 6, 1990, DOE/EIA-0533.

Natural Gas: Use and Expenditures; April 1983, DOE/EIA-0382.

Public-Use Tapes

Note: Later tapes are available through NTIS. Current microdata for the various surveys can be found on the Consumption Homepage at http://www.eia.doe.gov/emeu/page1.html.

Residential and Residential Transportation Sectors

Residential Transportation Energy Consumption Survey, 1988, Order No. PB90-501461.

Residential Energy Consumption Survey: 1987 and Residential Transportation Energy Consumption Survey, 1988, Order No. PB90-501461.

Residential Energy Consumption Survey: 1984 and Residential Transportation Energy Consumption Survey, 1985; Order No. PB87-186540.

Residential Energy Consumption Survey: 1982 and Residential Transportation Energy Consumption Survey, 1983; Order No. PB85-221760.

Residential Energy Consumption Survey: Consumption and Expenditures, 1980-1981; Monthly Billing Data; Order No. PB84-166230.

Residential Energy Consumption Survey: Housing Characteristics, 1981; Consumption and Expenditures, 1981-1982; Monthly Billing Data; Order No. PB84-120476.

Residential Energy Consumption Survey: Housing Characteristics, Annualized Consumption and Expenditures, 1980-1981; Order No. PB83-199554.

Residential Energy Consumption Survey: Household Transportation Panel Monthly Gas Purchases and Vehicle and Household Characteristics, 6/79-9/81; Order No. PB84-162452.

Residential Energy Consumption Survey: Household Screener Survey, 1979-1980; Order No. PB82-114877.

Residential Energy Consumption Survey: Household Monthly Energy Consumption and Expenditures, 1978-1979; Order No. PB82-114901.

National Interim Energy Consumption Survey (Residential), 1978; Order No. PB81-108714.

Commercial Sector

Nonresidential Buildings Energy Consumption Survey: 1986 Data; Order No. PB90-500034.

Nonresidential Buildings Energy Consumption Survey: 1979 and 1983 Data; Order No. PB88-245162.

Public-Use Diskettes

Note: The current public-use data can be found on the Consumption Homepage at http://www.eia.doe.gov/emeu/page1.html. Diskettes containing later public-use data are available through the Office of Scientific and Technical Information (OSTI) and the National Technical Information Service (NTIS). The prices noted may have changed.

Buildings and Energy in the 1980's data, OSTI - ASCII or dBase format, order by title, \$10 per diskette.

Commercial Buildings Consumption and Expenditures, 1992 data, OSTI - ASCII or dBase format, order by title, \$10 per diskette, \$40 set of four. NTIS - ASCII or dBase format, order by title, call for prices.

Commercial Buildings Characteristics 1992 data, OSTI - ASCII or dBase format, order by title, \$10 per diskette, \$40 set of four. NTIS - ASCII or dBase format: Order No. PB-94-504305, call for prices.

Commercial Buildings Energy Consumption Survey 1989 data, OSTI - ASCII format, order by title, \$10 per diskette, \$40 set of four. NTIS - ASCII format: Order No. PB92-504232, \$140.

Nonresidential Buildings Energy Consumption Survey 1986 Data, NTIS - ASCII format: Order No. PB91-506808, \$130.

Residential Transportation Energy Consumption Survey 1994 Data, http://www.eia.doe.gov/emeu/page1.html and OSTI-ASCII (3 diskettes) or dBase (3 diskettes), order by title, \$10.00 per diskette.

Residential Transportation Energy Consumption Survey 1991 Data, OSTI-ASCII (3 diskettes) or dBase (3 diskettes), order by title, \$10.00 per diskette, NTIS-ASCII Order No. PB94-500824, dBase Order No. PB94-500816.

Residential Transportation Energy Consumption Survey 1988 Data, OTSI - ASCII or dBase format, order by title, \$10 per diskette, \$40 for set of four. NTIS - ASCII format: Order No. PB91-507269, dBase format: Order No. PB91-507277, \$50 each.

Residential Energy Consumption Survey 1993 Data, OSTI-ASCII (5 diskettes) or dBase (4 diskettes) format, order by title, \$10.00 per diskette.

Residential Energy Consumption Survey 1990 Data, OSTI-ASCII (3 diskettes) or dBase (2 diskettes) format, order by title, \$10.00 per diskette, NTIS-ASCII format, Order No. PB93-506103 or dBase format, Order No. PB93-506095.

Residential Energy Consumption Survey 1987 Data, OSTI - ASCII or dBase format, order by title, \$10 per diskette, \$40 set of four. NTIS - ASCII format: Order No. PB-91-505115, \$130, and dBase format: Order No. PB-91-505107, \$130.

Note: The Energy Information Administration also publishes annually the *State Energy Data Report*, *Consumption Estimates*, DOE/EIA-0214; the *State Energy Price and Expenditures Report*, DOE/EIA-0376; and the *Monthly Energy Review*, DOE/EIA-0035. These reports contain annual and monthly consumption information derived from EIA supply surveys.