Mapping the Kansas Economy—
The Natural Environment

Energy   Water   Environment
KANSAS: TOTAL ENERGY PRODUCTION BY SOURCE
In trillion BTUs, 2006 — TOTAL 761.5

- Natural Gas: 426.8 TBTU (56.0%)
- Oil: 206.8 TBTU (27.1%)
- Nuclear: 97.6 TBTU (12.8%)
- Renewables: 20.8 TBTU (2.7%)
- Coal: 9.5 TBTU (1.2%)

Source: Energy Information Administration
KANSAS: TOTAL ENERGY CONSUMPTION BY SOURCE
In trillion BTUs, 2007 – TOTAL 1,243.2

- Natural Gas: 291.6 (23.5%)
- Coal: 396.3 (31.9%)
- Oil: 424.5 (34.1%)
- Nuclear: 108.8 (8.8%)
- Geothermal, solar, wind: 12.1 (0.1%)
- Biomass: 9.8 (0.1%)
- Hydro: 0.1 (0.0%)

Source: U.S. Energy Information Administration

KANSAS: VALUE OF FUEL AND NON-FUEL MINERALS

- 2008:
  - Oil
  - Gas
  - Non-fuel Minerals
- 2007:
  - Oil
  - Gas
  - Non-fuel Minerals
- 2006:
  - Oil
  - Gas
  - Non-fuel Minerals
- 2005:
  - Oil
  - Gas
  - Non-fuel Minerals
- 2004:
  - Oil
  - Gas
  - Non-fuel Minerals

Source: Kansas Geological Survey
Top Ten Counties for Gas Production (MCF) in 2008

Yearly Gas Production in Southeastern Kansas

Includes: Allen, Bourbon, Coffey, Crawford, Labette, Miami, Montgomery, Neosho, Wilson, Woodson counties

- Production (Bcf)
- Estimated Production (Bcf)

Yearly Net Increase or Decrease in Number of Producing Wells

Million Cubic Feet per Well

Producing Wells

Billion Cubic Feet
U.S. Energy Consumption by Fuel (1980-2030) quadrillion BTUs

Energy Consumption by Fuel, 1980 -2030 (quadrillion Btu)

History

Projections

Liquids

Natural Gas

Coal

Nuclear

Nonhydro renewables

Hydropower

U.S. Energy Information Administration
Source of Water - Ground vs Surface

Water Level Trends 1996 to 2008

Average Depth to Water Across the High Plains Aquifer
(continuous measurement wells, 1996 to 2008)
Accumulated Water Level Trends 1996 to 2009

Estimated Usable Lifetime:
400 gpm Varying Hydraulic Conductivity Threshold
Per Capita GHG Emissions in 2005

- Wyoming: 95 tons CO₂
- North Dakota: 74 tons CO₂
- Alaska: 73 tons CO₂
- West Virginia: 49 tons CO₂
- Montana: 46 tons CO₂
- Louisiana: 44 tons CO₂
- Indiana: 42 tons CO₂
- Nebraska: 42 tons CO₂
- Kentucky: 40 tons CO₂
- Iowa: 39 tons CO₂
- South Dakota: 38 tons CO₂
- Kansas: 38 tons CO₂

KS ranked 12th

Climate Analysis Indicators Tool (CAIT US) Version 3.0 (Washington, DC: World Resources Institute, 2008).

Carbon Capture & Storage Process
CO₂ Sources & Potential Storage Sites

Kansas Geological Survey

Energy Water Environment

www.kgs.ku.edu/