

EIA State Portal: An energy snapshot by state



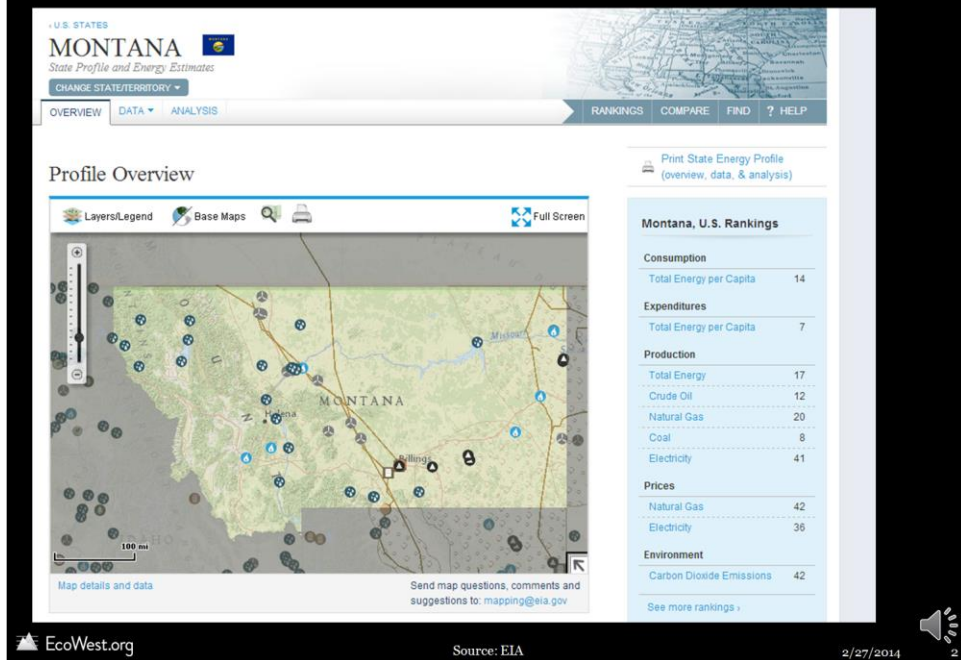
 EcoWest.org

2/27/2014



In this EcoWest presentation, we explore features of a web portal hosted by the U.S. Energy Information Administration, which provides state-level data on energy consumption, production, and pricing.

State profile: Montana



Narrative: From the main landing page, users can select an individual state and overlay various energy infrastructure layers, such as coal plants, hydroelectric plants, natural gas pipelines, transmission lines, and LNG export terminals. Once the map is displayed, you can select icons shown on the map to learn more about the infrastructure, such as the name of individual plants and their production capacity. For our explorations in this presentation, we'll use Montana as a sample profile.

Source: U.S. Energy Information Administration
URL: <http://www.eia.gov/state/>

Montana, U.S. Rankings

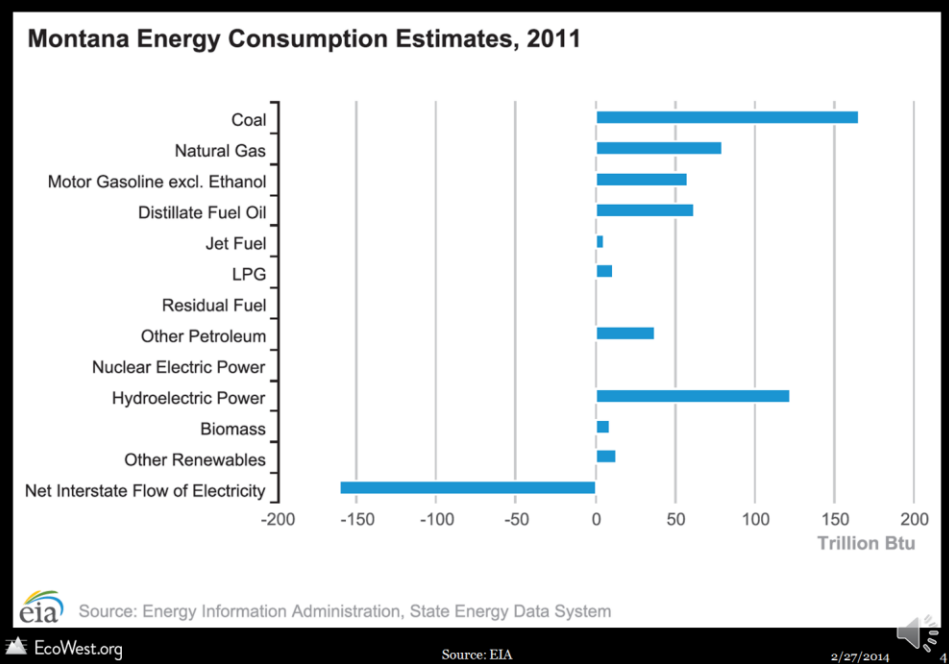
Consumption	
Total energy per capita	14
Expenditures	
Total energy per capita	7
Production	
Total Energy	17
Crude Oil	12
Natural Gas	20
Coal	8
Electricity	41
Prices	
Natural Gas	46
Electricity	37
Environment	
Carbon dioxide emissions	42



Narrative: For easy reference, the portal provides a chart on the state profile page to indicate how that state ranks against all other U.S. states in terms of energy consumption, production, pricing, expenditures, and emissions. As you can see from the chart here, Montana is the country's eighth largest producer of coal: it produces roughly 3-4 of every 100 tons of U.S. coal. It produces a relatively low level of carbon dioxide emissions, mostly owing to its sparse population.

Source: U.S. Energy Information Administration
URL: <http://www.eia.gov/state/>

Montana: Consumption by Source



Narrative: For each state, the portal provides a quick glance of energy consumption by sector. Montana uses roughly half of the electricity generated in the state. The remainder is transported by transmission lines to other western states.

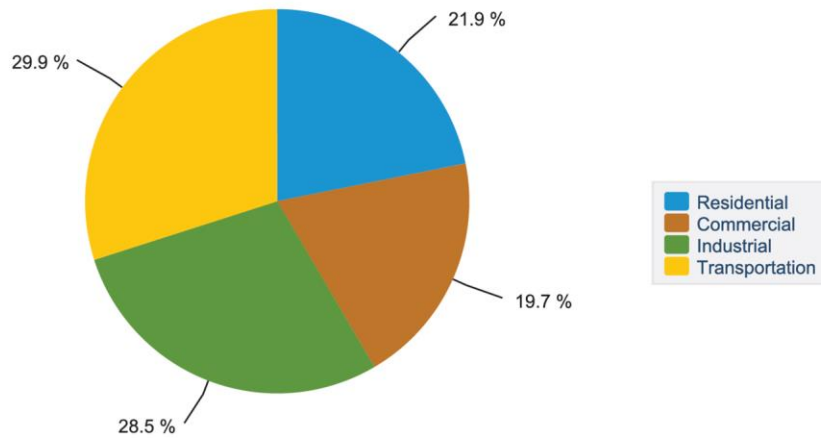
Montana holds over one-quarter of the country's estimated recoverable coal reserves, which is why coal makes up more than half of the state's net electricity generation. Hydropower, which is the major contributor to renewable energy in Montana, makes up the second largest share of energy consumed in the state.

Source: U.S. Energy Information Administration

URL: <http://www.eia.gov/state/>

Montana: Consumption by Sector

Montana Energy Consumption by End-Use Sector, 2011



Source: Energy Information Administration, State Energy Data System

EcoWest.org

Source: EIA

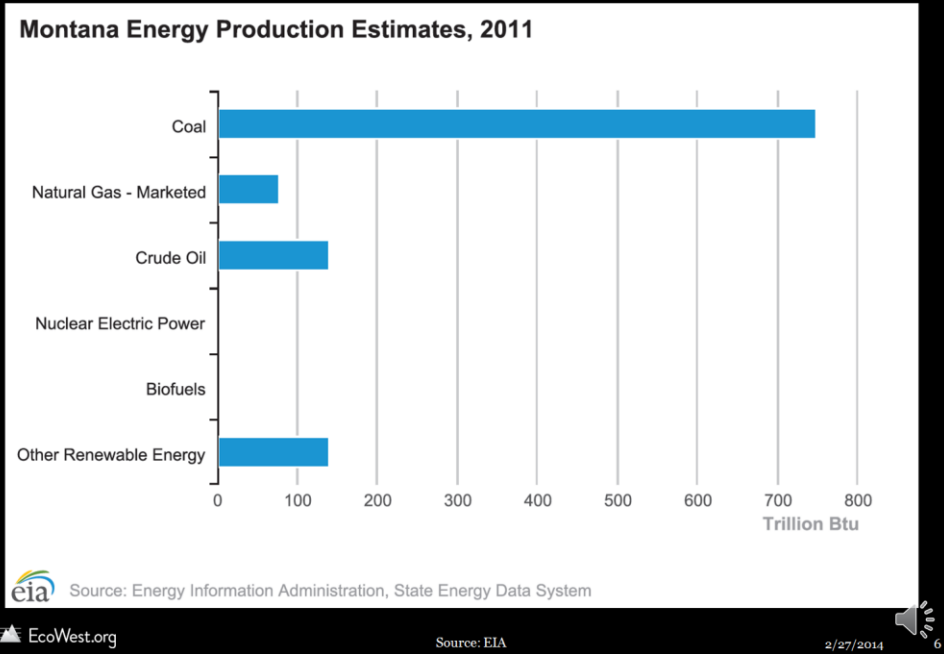
2/27/2014

5

Narrative: You can also view the breakdown of energy consumption by sector for each state. In Montana, the transportation and industrial sectors account for roughly three-fifth of energy use in the state. At the national level, the industrial and transportation sectors are also the leading energy users by sector.

Source: U.S. Energy Information Administration
URL: <http://www.eia.gov/state/>

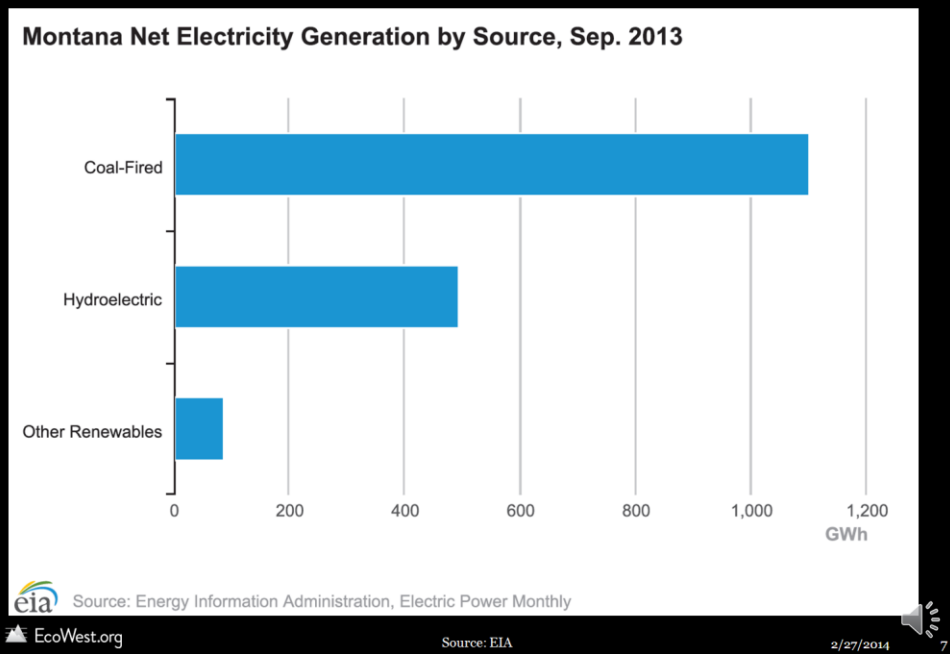
Montana: Energy Production



Narrative: The portal also provides a profile of energy production for each state. As this chart clearly depicts, coal dominates energy production in Montana. Roughly one-quarter of the coal mined in Montana is consumed in-state for electric power; two-fifths is sent to more than 15 states; and one-third is shipped for export markets, mainly to Asia.

Source: U.S. Energy Information Administration
URL: <http://www.eia.gov/state/>

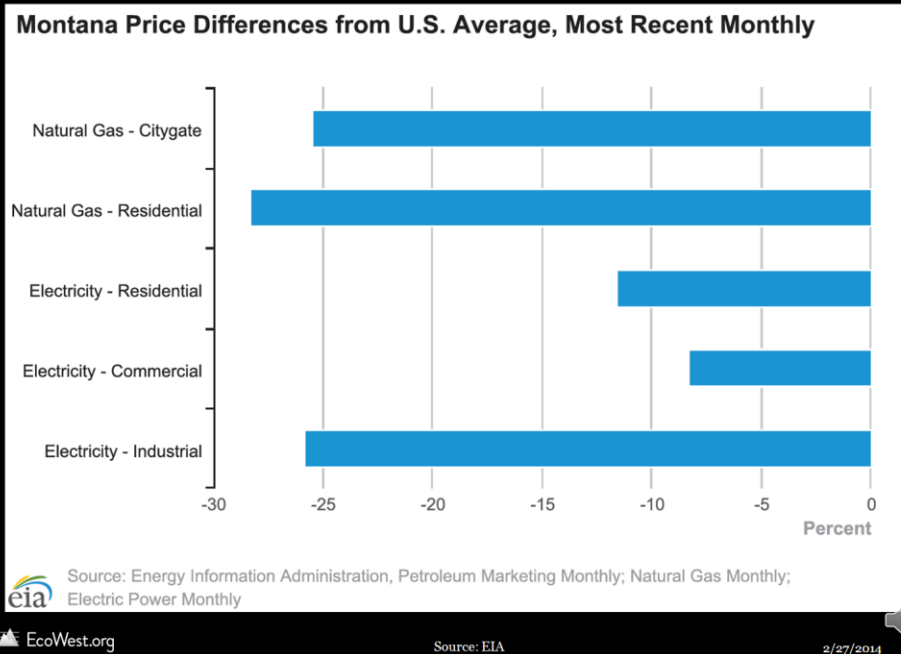
Montana: Electricity Generation



Narrative: Montana relies on coal for roughly 60% of its electricity production. Hydroelectric power produces about one-third of the state's electricity production, while renewables (primarily wind) supply smaller amounts of electricity. The state has the third highest commercial wind potential in the country. The expansion of the state's wind industry depends partly on renewable energy demand from California and other states.

Source: U.S. Energy Information Administration
URL: <http://www.eia.gov/state/>

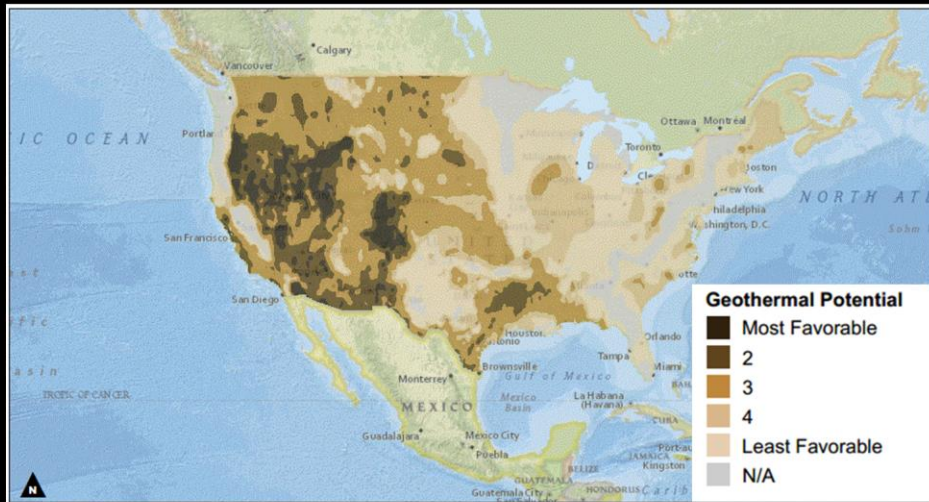
Montana: Energy Prices



Narrative: Energy prices in Montana are comparatively low (about 25 percent lower than the national average). These low prices are primarily due to a stable supply of energy produced in-state and a relatively low demand from the state's sparse population.

Source: U.S. Energy Information Administration
URL: <http://www.eia.gov/state/>

Geothermal potential



EcoWest.org

Source: EIA

2/27/2014



Narrative: Although it has remained largely untapped as an electricity source, geothermal has significant potential in Montana, particularly in the mountainous southwest corner of the state.

Source: U.S. Energy Information Administration

URL: <http://www.eia.gov/state/>

Download more slides and other resources

The screenshot displays the EcoWest.org website with a navigation menu including ABOUT, BIODIVERSITY, CLIMATE, FIRES, LAND, POLITICS, and WATER. The main content area features a large article titled "2012 was hottest year on record for U.S." with a map of the United States showing temperature anomalies. Below this are four smaller article thumbnails: "Hawaii, West and South have most at-risk species", "Ebb and flow of snow, fuels, and fire", "2012 was hottest year on record for U.S.", and "Which states have the most federal land?". The website footer includes the EcoWest.org logo, the date 2/27/2014, and a speaker icon with the number 10.

Please visit EcoWest.org to download slides and find other resources related to environmental trends in the West.