Coal is a naturally occurring resource extracted from geologic formations. Coal is composed of carbon and hydrocarbon derived from compacted organic material and contains high amounts of chemical potential energy. It is burned to release this energy. While once relied on for the lion's share of electricity generation in the U.S., coal has been disfavored for its various emissions. Nevertheless, coal accounts for around 20 percent of electricity generation, numerous industrial and manufacturing energy applications, and is often relied on to fill gaps from renewables.
The United States has vast reserves of coal in both underground and surface sites. These are currently accessible through strip mining, open-pit mining, mountaintop removal, and more. Over time, these reserves can actually increase, as new geologic formations are identified and as technology improves to recover previously unreachable reserves. In addition to being a vital energy resource for electricity generation and industrial heat, coal and its byproducts are used in cement production, water filters, carbon fibers, medicines, tars, soaps, synthetic fuels, and other industrial and manufacturing applications.