

The air and water pollution emitted by coal and natural gas plants is linked with breathing problems, neurological damage, heart attacks, cancer, premature death, and a host of other serious problems. In contrast, fossil fuels can have a significant impact on water resources: both coal mining and natural gas drilling can pollute sources of drinking water, and all thermal power plants, including those powered by coal, gas, and oil, withdraw and consume water for cooling. However, NREL's 80-percent-by-2050 renewable energy study, which included biomass and geothermal, found that total water consumption and withdrawal would decrease significantly in a future with high renewables [7]. Wind, solar, and hydroelectric systems generate electricity with no associated air pollution emissions. Hydroelectric power plants can disrupt river ecosystems both upstream and downstream from the dam.