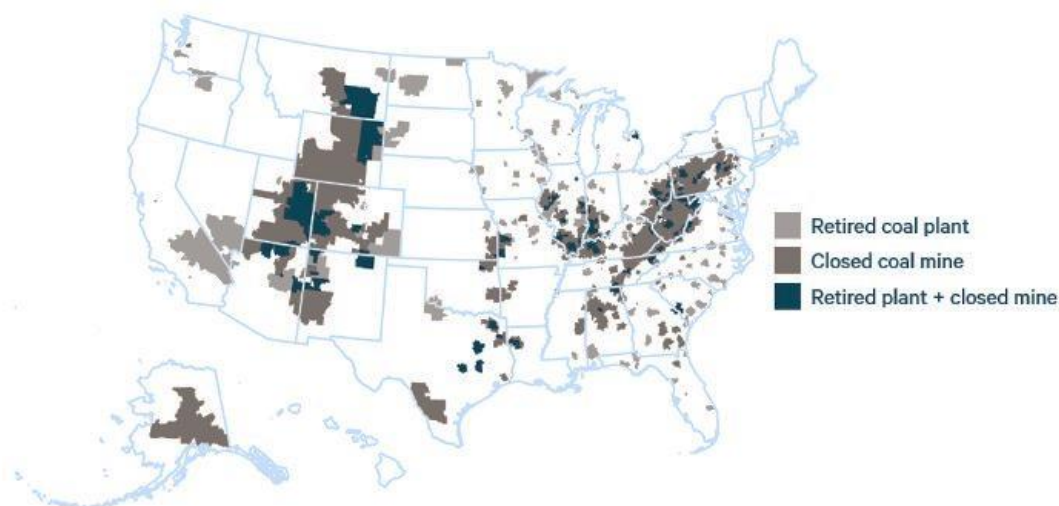


Opportunities for a Coal-to-Nuclear Transition

Many communities across the U.S. rely heavily on aging coal facilities for electricity generation and as major sources of economic activity. Over the past 20 years, hundreds of coal facilities have shut down totaling around 100 gigawatts (GWs) of lost electric generation, leaving these coal communities susceptible to economic decline during the energy transition to zero-carbon emitting sources. These communities are looking for solutions that provide high-quality jobs and a reliable tax base as the nation seeks new sources of clean, reliable electricity.



Retired coal facilities in the United States will affect communities nationwide

Source: "[What is an Energy Community](#)" by Daniel Raimi and Sophie Pesek

A September 2022 U.S. Department of Energy report on [coal-to-nuclear feasibility](#) found that advanced nuclear energy could play a major role in communities with retiring coal facilities:



Advanced Nuclear Energy Can Repower the Grid

The DOE found that 80% of retired and operating coal power plant sites could host an advanced nuclear reactor, paving the way for 263.3 GWe of coal-to-nuclear replacement projects across the United States. Advanced nuclear is a [zero-carbon, "always available" energy source](#) that helps meet communities' energy needs and complements renewable energy sources.



Advanced Nuclear Energy Can Repower Communities

A 924 MWe coal-to-nuclear conversion could increase regional economic activity by \$275 million and add 650 new, high paying, permanent jobs to the region, many of which are [traditional coal jobs](#) that could transition to roles at an advanced reactor.

These recommendations align with recent federal legislation on the clean energy transition. In August 2022, President Biden signed the Inflation Reduction Act of 2022 (IRA) providing an opportunity for coal communities to invest in advanced nuclear energy. Included in the [advanced nuclear energy tax provisions](#) in IRA were additional boosters for each type of tax credit if a clean energy project is located within an "energy community". Retired coal sites, as defined by IRA, are considered "energy communities" and are eligible for boosted tax credits for clean energy projects. Fully decarbonizing the U.S. power grid and producing zero-carbon fuels will require hundreds of GWs of new zero-carbon, "always available" energy. Repowering coal plants with advanced nuclear energy helps to achieve decarbonization while taking advantage of a local workforce with experience running energy facilities.