

GAO Highlights

Highlights of [GAO-15-302](#), a report to congressional requesters

Why GAO Did This Study

The states and the federal government have supported the development of electricity generation projects in a variety of ways. In recent years, state and federal supports have been targeted toward renewable energy sources, such as solar and wind, although there have been some supports for projects using traditional sources—natural gas, coal, and nuclear.

GAO was asked to examine state and federal supports for the development of utility-scale electricity generation projects—power plants with generating capacities of at least 1 MW that are connected to the grid and intend to sell electricity—for fiscal years 2004 through 2013. This report (1) identifies key state supports for these projects; (2) examines key federal support provided through outlays, loan programs, and tax expenditures for these projects; and (3) examines how state and federal supports affect the development of new renewable projects. GAO analyzed relevant legislation, agency outlay and loan program data, and interviewed stakeholders, including project developers and experts. GAO also surveyed state regulatory commissions about state policies. In addition, GAO modeled the impact of reducing federal tax expenditures on project finances.

What GAO Recommends

Congress should consider directing IRS to (1) collect and report project-level data from all taxpayers who claim the ITC and (2) collect and report similar data for taxpayers who claim the PTC.

DOE, Treasury, and USDA did not provide formal comments in response to a draft of this report.

View [GAO-15-302](#). For more information, contact Frank Rusco at (202) 512-3841 or RuscoF@gao.gov.

ELECTRICITY GENERATION PROJECTS

Additional Data Could Improve Understanding of the Effectiveness of Tax Expenditures

What GAO Found

Key state supports, in the form of state policies, aided the development of utility-scale electricity generation projects—particularly renewable ones—in most states, for fiscal years 2004 through 2013. For example, most states have a renewable portfolio standard (RPS) mandating that retail service providers obtain a specific amount of the electricity they sell from renewable energy sources, which creates additional demand for renewable energy. In addition, most states supported new renewable and traditional projects through regulatory policies that set electricity prices, which allowed utilities to recover the costs of building new projects or purchasing electricity from them.

Federal financial supports aided the development of new projects, but limited data hinder an understanding of the effectiveness of tax expenditures. From fiscal year 2004 through 2013, programs at the Departments of Agriculture (USDA), Energy (DOE), and the Treasury (Treasury) provided supports including outlays, loan programs, and tax expenditures. For example, one Treasury program provided payments in lieu of tax credits and accounted for almost all of the \$16.8 billion in outlays that supported 29,000 megawatts (MW) of new renewable generating capacity. Tax expenditures accounted for an estimated \$13.7 billion in forgone revenue to the federal government for renewable projects and \$1.4 billion for traditional projects. The two largest tax expenditures GAO examined—the Investment Tax Credit (ITC) and the Production Tax Credit (PTC)—supported renewable projects and accounted for \$11.5 billion in forgone revenue. However, the total generating capacity they supported is unknown because the Internal Revenue Service (IRS) is not required to collect project-level data from all taxpayers claiming the ITC or report the data it does collect, nor is it required to collect project-level data for the PTC. IRS officials stated that IRS is unlikely to collect additional data on these tax credits unless it is directed to do so. Since 1994, GAO has encouraged greater scrutiny of tax expenditures, including data collection. Without project-level data on the ITC and PTC, Congress cannot evaluate their effectiveness as it considers whether to reauthorize or extend them.

Developers combined state and federal supports to finance renewable projects, and reducing these supports would likely reduce development of such projects. Demand created by state RPSs allowed developers of renewable projects to obtain power purchase agreements (PPA)—long-term contracts to sell power at specific prices. Federal supports, in turn, lowered developers' costs to build renewable projects, which allowed them to offer lower PPA prices than they otherwise could have. According to most stakeholders, these lower prices were then passed on to retail customers. Overall, if the level of support is reduced, fewer projects would likely be built. For example, GAO's modeling suggests that reducing the ITC or eliminating the PTC would likely reduce the number of renewable projects built because developers' returns would decline unless PPA prices increased to compensate for the reduction in federal support. The extent to which development would decrease depends on how states respond to reduced federal support and the associated increase in prices. For example, many states limit the amount retail prices could increase, limiting PPA price increases, which could reduce development.