

Key Elements of the U.S. Tax System

TAXES, ENERGY, AND THE ENVIRONMENT
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What tax incentives encourage energy production from fossil fuels?

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A. Provisions of the federal income tax that subsidize domestic production of fossil fuels include the expensing of exploration, development, and intangible drilling costs; the use of percentage depletion instead of cost depletion to recover drilling and development costs of oil and gas wells and coal mining properties; and numerous smaller incentives for production and distribution of oil, coal, and natural gas.

Various tax incentives promote investment in fuel development, potentially diverting capital from investments in other assets with higher pretax yields. Several studies have found that the effective marginal tax rate—the extent to which all applicable tax provisions reduce the after-tax return on new investment—is much lower for oil, gas, and coal development than for other assets. The Obama administration proposed eliminating these incentives in most of its budgets, but Congress took no action.

Supporters justify these tax incentives as a means of reducing US dependence on imported oil. But such incentives also encourage more rapid exhaustion of domestic supplies, which may increase dependence on imports in the long run. The three largest energy tax incentives are expected to reduce federal tax revenue by nearly \$11.6 billion from 2017 to 2021 (figure 1).

Intangible drilling costs cover the labor and materials needed for drilling and developing oil and gas wells and coal mines. Independent oil and gas producers (i.e., those without related refining and marketing operations) may deduct these costs from income in the year incurred, even though, as capital investments, they produce returns over many years. Integrated oil and gas companies may deduct 70 percent of these costs in the first year and recover the remaining 30 percent over the next five years.

With percentage depletion, producers can deduct a fixed percentage of gross revenue from a property as capital expenses each year. In contrast, with conventional cost depletion, producers deduct their actual costs as the resources from a well or mine are depleted. The federal income tax allows independent producers—but not integrated companies—to deduct 15 percent of gross revenue from their oil and gas properties as percentage depletion, without regard to how much they have invested in the properties. Percentage depletion is permitted only on the company's first 1,000 barrels per day from a property and is limited to net income from oil and gas properties. Percentage depletion is also available for coal and other minerals at varying rates.

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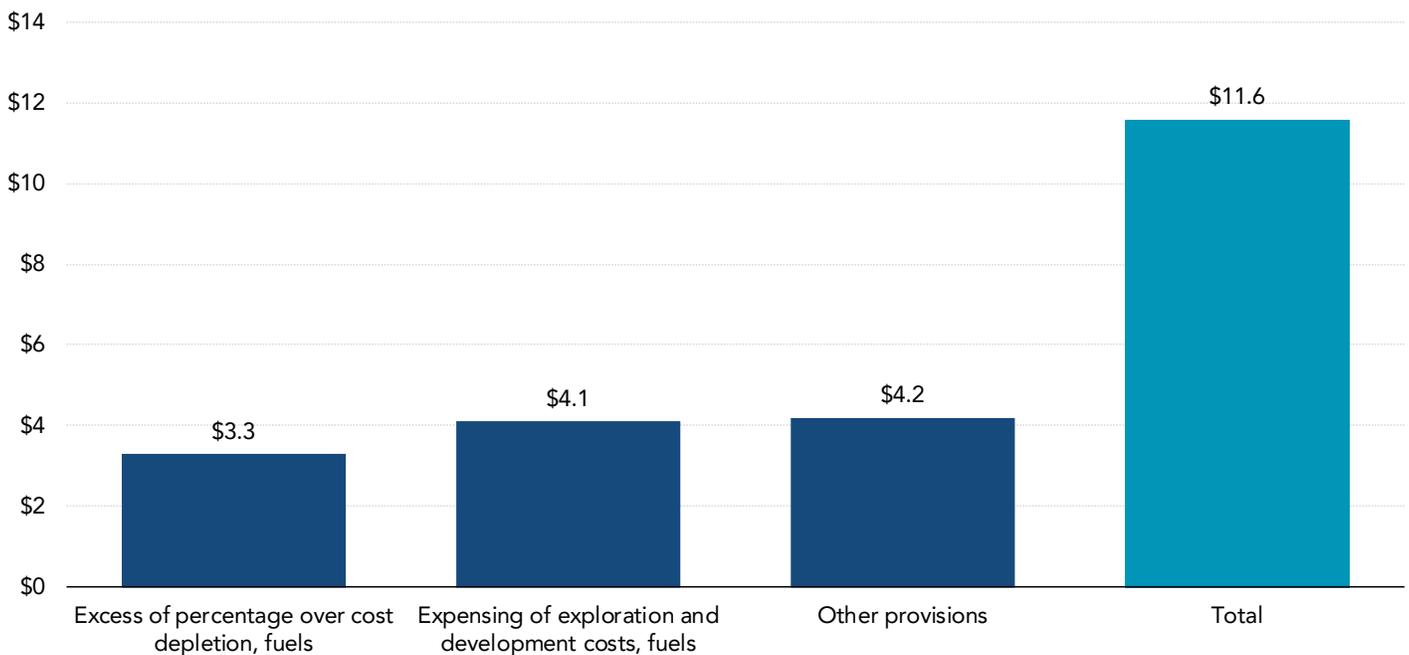
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FIGURE 1

Tax Incentives for Energy Production from Fossil Fuels Revenue losses, fiscal years 2017–21



Billions of dollars



Source: Joint Committee on Taxation (2018).

Note: "Other provisions" includes exception from passive loss limitations for working interests in oil and gas properties, capital gains treatment of royalties on coal, exclusion of interest on energy facility bonds, credit for investment in clean coal facilities, treatment of natural gas distribution facilities as 15-year property, and amortization of all geological and geophysical expenditures over 2 years.

The tax law includes several smaller (but hardly trivial) incentives for investments in refineries, pipelines, oil and gas exploration, and selected coal technologies, including for carbon capture and sequestration. In addition, domestic energy properties used to benefit from the domestic production deduction provided in the American Jobs Creation Act of 2004, but this deduction was repealed in the Tax Cuts and Jobs Act enacted in 2017.

Subsidizing domestic production of fossil fuels is inconsistent with the policy goal of reducing fossil fuel use to counter global climate change. But the adverse effects of the incentives on climate change are minor, because any increase in domestic production they induce mostly displaces imports rather than raising domestic fuel consumption.

Some prior research concludes that the production incentives reduce the world market price of oil by less than 0.1 percent, which would barely effect consumption of gasoline and other oil-based products. Moreover, a recent study by the National Academy of Sciences finds that subsidies for oil and gas production may slightly reduce greenhouse gas emissions by accelerating the conversion of electricity production facilities from coal to natural gas.

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Data Source

Joint Committee on Taxation. 2018. "[Estimates of Federal Tax Expenditures for Fiscal Years 2017–2021](#)." JCX-34-18. Washington, DC: Joint Committee on Taxation.

Further Reading

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