



## How the United States Could Benefit from Eliminating Ineffective Fossil Fuel Subsidies

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For more than a century, the U.S. federal government has subsidized the production of fossil fuels through the tax code. These tax expenditures – amounting to de facto government spending – lower the cost of investment and increase the revenues from fossil fuel production. However, research shows that the subsidies do very little to increase U.S. fossil fuel production, because the impact of subsidy use on investment decisions depends on other factors such as technological improvements in oil and gas drilling, shifts in energy demand in the global energy market, production decisions by the Organization of the Petroleum Exporting Countries, and unsettling political events in the Middle East. Without achieving much, if any, useful economic impact, fossil fuel subsidies are transferring about \$4 billion annually from the pockets of taxpayers into those of fossil fuel producers.

### How Subsidies Benefit Fossil Fuel Companies

Special accounting rules plus numerous subsidies allow the oil and gas industry to profit at the expense of U.S. taxpayers, much more than other industries are able to do.

- Energy firms are able to expense so-called intangible drilling costs for inputs such as cement or drilling fluids, instead of depreciating them (that is, accounting for their loss of value) over the lifetime of wells. This policy differs from the rules that cover most other capital investments in America. When oil and gas firms expense these costs instead of depreciating them over the life of wells, they reap benefits based on the difference between the expensed costs and the present value of gradually writing off costs over the project lifetime.
- Since 1926, firms have had the choice of using cost depletion – writing off the initial costs of acquiring an oil and gas field over that field's production lifetime – or percentage depletion – deducting a percentage of revenues from oil and gas sales – to reduce their tax liabilities. While the former is consistent with standard depreciation practices for other industries, the latter may have little to no relationship to actual project costs because revenues reflect crude oil prices, which are driven by the oil market. When firms choose percentage depletion – which is more generous to oil and gas producers when oil prices are high, due to higher revenues – they enjoy a subsidy relative to standard tax depreciation rules.
- In more recent decades, fossil fuel producers have also enjoyed a variety of other subsidies. Under the manufacturing tax deduction established in 2004, oil and gas producers may claim a 6% deduction and coal producers a 9% deduction of taxable income of hydrocarbon production, despite the fact that it is not a manufacturing activity. The enhanced oil recovery tax credit increases revenues from production that recovers crude oil and natural gas from older, more depleted oil and gas fields. Unlike percentage depletion, this subsidy becomes less generous – and declines to zero – when oil prices are high (because the credit decreases as prices increase).

### Eliminating Subsidies Would Not Harm the Fossil Fuel Industry or the Economy

Economic analyses reveal that these subsidies are simply increasing profits for oil and gas firms, without encouraging job creation or higher oil production. According to researchers at Resources for the Future, eliminating oil subsidies would only reduce U.S. oil production by 26,000 barrels per day – which amounts to a mere two weeks' worth of output growth since 2008. Likewise, the Department of the Treasury estimates that a phase-out of all hydrocarbon tax preferences would cause a less than one-half of one percent decline in U.S. oil and gas output. In 2013 the National Research Council estimated that, even with the elimination of percentage depletion, domestic natural gas production would continue to increase over the next two decades, albeit at a modestly slower rate. Because these tax subsidies do not meaningfully affect production, they also

do not stimulate job creation or lower prices for U.S.-produced oil, petroleum products, and natural gas. They simply deliver billions of dollars of extra profits to the firms claiming them without any benefit for consumers, workers, or national energy security.

## Financing Infrastructure and Enabling Tax Reform

Eliminating fossil fuel subsidies could facilitate important national breakthroughs – such as infrastructure revitalization or comprehensive tax reform. Revenues recaptured from removing tax expenditures for oil and gas subsidies – about \$40 billion over ten years – could be used to help finance much-needed new investments in repairing and modernizing America's infrastructure. Alternatively, the recovered revenue could help Congress legislate lower tax rates on corporate or personal income without increasing the federal deficit. Politically speaking, any effective reform of the corporate tax code would likely have to include the across-the-board removal of many tax credits, deductions, or exemptions in exchange for a lower corporate income tax rates. All industries would have to give up breaks, including the fossil fuel industry.

## Leveraging Reforms around the World

Returns to U.S. taxpayers from eliminating fossil fuel subsidies could be even more significant because American reforms could leverage similar reforms of fuel pricing in countries around the world. At the 2009 Pittsburgh summit where leaders from the world's 20 largest developed and developing economies gathered to discuss policy issues, the United States spearheaded an agreement to phase out fossil fuel subsidies. Although this agreement continues to receive attention, progress in actually implementing it has been slow – in part because the U.S. Congress has failed to act on proposals to eliminate fossil fuel tax subsidies. Other nations are unlikely to act until America does, yet eliminating fossil fuel subsidies in the developing world – which typically support consumption through lower-than-market prices – would yield significant benefits for the United States as well as other countries. Global carbon dioxide emissions contributing to climate change could fall by 10%. At the same time, economic output could grow, as costly regulatory and market distortions are removed in developing economies.

Read more in Joseph E. Aldy, **"Eliminating Fossil Fuel Subsidies"** in *15 Ways to Rethink the Federal Budget* (Michael Greenstone, Max Harris, Karen Li, Adam Looney, and Jeremy Patashnik, editors) (Brookings Institution, 2013); 31-35; Joseph E. Aldy, **"Money for Nothing: The Case for Eliminating U.S. Fossil Fuel Subsidies."** *Resources* 186 (2014): 32-37; and Joseph E. Aldy, **"Policy Surveillance in the G20 Fossil Fuel Subsidies Agreement: Lessons for Climate Policy."** *Climatic Change* (2015): 1-14.