CASHING IN ON ALL OF THE ABOVE:

U.S. FOSSIL FUEL PRODUCTION SUBSIDIES UNDER OBAMA

OILCHANGE INTERNATIONAL

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For more information on fossil fuel subsidies please visit:
priceofoil.org/fossil-fuel-subsidies/
and
shiftthesubsidies.org

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EXECUTIVE SUMMARY

Each year, the U.S. federal and state governments give away more than $21 billion in subsidies to oil, gas, and coal companies to promote increased fossil fuel production and exploration – expanding oil and gas development and increasing the reserves base at the same time that climate scientists around the world agree that we need to leave at least two-thirds of existing reserves in the ground to avoid catastrophic climate change.

Thanks in large part to these huge subsidies, U.S. fossil fuel production is booming. Between 2009 and 2013, natural gas production increased by 18 percent and oil production increased by 35 percent. Although President Obama has pledged to tackle climate change and eliminate fossil fuel subsidies, he champions the oil and gas boom as the centerpiece of his Administration's "All of the Above" energy strategy.

Since President Obama took office in 2009, federal fossil fuel subsidies have grown in value by 45 percent, from $12.7 billion to a current total of $18.5 billion. This rise is mostly due to increased oil and gas production: the value of tax breaks and other incentives has increased along with greater production and profits, essentially rewarding companies for accelerating climate change.

It should be noted that President Obama has proposed ending some of the most direct and fastest-growing subsidies to the oil industry in every budget he has sent to Capitol Hill. If Congress had not blocked these proposals, they would have resulted in $6.1 billion less in subsidies in 2013, and the value of federal subsidies would have declined by 2% during the Obama Administration.

In summary, the findings in this report include:

- The United States federal and state governments gave away **$21.6 billion in production and exploration subsidies to the oil, gas, and coal industries in 2013**.
- At the federal level only, largely due to increased oil and gas, production, **fossil fuel production and exploration subsidies have grown in value by 45 percent since President Obama took office in 2009** from $12.7 billion to a current total of $18.5 billion.
- Repeated attempts by the Administration to reduce subsidies have failed at least in part because of the cozy relationship between Congress and the fossil fuel industry. In 2011-12, oil, gas, and coal companies spent $329 million in campaign finance contributions and lobbying expenditures and received $33 billion in federal subsidies over the same two years **– a more than 10,000 percent return on investment**.
- More than **$5 billion annually is spent by U.S. taxpayers for federal subsidies that encourage further exploration and development of new fossil fuel resources** – resources we know we cannot afford to burn
- Subsidies promoting fossil fuel production on federal property – related to rules governing **royalty payments to the U.S. government for leasing federal oil, gas, and coal-producing land – total nearly $4 billion each year**.
- Fossil fuel company **deductions for pollution clean-up costs from their tax payments range from tens of millions to billions of dollars each year**. These subsidies incentivize not only increased production, but also increased pollution and poor environmental stewardship by transferring the risk and expense of damages onto taxpayers.
- Although not included in the production subsidy totals, above, there are a number of additional types of support to the oil, gas, and coal industries that should be noted, including:
  - U.S. federal and state **consumption subsidies are on the order of $11 billion a year**, but were not included in the total above in order to focus on exploration and production subsidies. Thus the total annual value of all known U.S. state and federal fossil fuel exploration, production, and consumption subsidies is $32.8 billion.
  - U.S. financing of fossil fuel projects overseas **increased by 14 percent from $4.1 billion in 2009 to $4.7 billion in 2013**, driven by an increase in bilateral oil and gas project lending.
  - **Additional costs borne by taxpayers related to the military, climate, local environmental, and health impacts of the fossil fuel industry are credibly estimated between $360 billion and $1 trillion each year – in the United States alone.**

Channeling billions of taxpayer dollars to the oil, gas, and coal industries each year is in direct opposition to the urgent demands of climate change. The U.S. needs to reject its current All of the Above energy strategy that amounts to nothing less than climate denial and live up to its promises to eliminate fossil fuel subsidies and usher in a rapid transition to clean, renewable energy.


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WHAT IS A FOSSIL FUEL SUBSIDY?

Broadly speaking, a fossil fuel subsidy is any government action that lowers the cost of production, lowers the cost of consumption, or raises the price received by producers. Types of fossil fuel subsidies include financial contributions or support from the government or private bodies funded by governments, including direct transfers of funds, transfer of risk such as loan guarantees, foregone revenue including through tax breaks, and provision of goods and services aside from general infrastructure.[1]

Oil Change International groups fossil fuel subsidies according to three categories:

1. **Exploration**: support for expanding fossil fuel reserves, including the discovery of new resources;

2. **Production**: support to fossil fuel companies for producing oil, gas, and coal, usually in the form of special tax deductions, low-cost access to government land, and infrastructure support; and

3. **Consumption**: support to consumers to lower the cost of fossil fuel use. (U.S. fossil fuel consumption subsidies are listed in Appendix II but are not included in the total subsidy estimates in this analysis).

Given the increasing urgency of climate change, as well as fiscal concerns around government spending, it is highly inefficient to continue subsidizing fossil fuels. Removing subsidies to the fossil fuel industry is one of the first, and least, goals that public policy should seek to achieve, especially given U.S. failure to pass carbon price legislation and the huge unaccounted for social cost of carbon resulting from increased U.S. fossil fuel production.

While international pressure for fossil fuel subsidy elimination has been mostly targeted at consumption subsidies, exploration and production subsidies are potentially even more damaging because they encourage the extraction of more and more dirty energy resources that our climate can't safely absorb.

For this reason, and because consumption subsidies are often intended to support social goods beyond the corporate health of oil, gas, and coal companies (such as heating for the poor or affordable fuel for farmers) the focus of this report is U.S. fossil fuel exploration and production subsidies.

1 Definition adapted from OECD, "An OECD-Wide Inventory of Support to Fossil-Fuel Production or Use," 2012, http://www.oecd.org/site/tadffss/Fossil%20Fuels%20Inventory_Policy_Brief.pdf and WTO, "Defining Subsidies," World Trade Report 2006, http://www.wto.org/english/res_e/booksp_e/anrep_e/wtr06-2b_e.pdf and WTO Agreement on Subsidies and Countervailing Measures Article 1.1: http://www.wto.org/english/docs_e/legal_e/24-scm_01_e.htm

UNBURNABLE CARBON AND U.S. FOSSIL FUEL SUBSIDIES

Scientists around the world agree that governments and corporations must find a way to leave the majority of oil, gas, and coal reserves in the ground to avoid the worst impacts of climate change. The International Energy Agency warns that "no more than one-third of proven reserves of fossil fuels can be consumed prior to 2050 if the world is to achieve the 2°C goal," which is the conservative, globally accepted threshold of average global temperature increase for avoiding catastrophic climate change.[2]

Despite this clear scientific consensus on the need to leave the vast majority of proven fossil fuel reserves in the ground, this report finds that the U.S. government is funneling more than $21 billion dollars each year to the oil, gas, and coal industries to support the discovery and production of fossil fuels. Overall U.S. subsidies totaled $21.6 billion in 2013, of which $18.5 billion came from the federal government and the remainder from state-level incentives.[3]

Federal government subsidies in this total include support for fossil fuel exploration and production, such as tax deductions for oil and gas drilling costs and cheap access to federal land for fossil fuel production.

State government subsidies included in this total are drawn directly from OECD data and include exploration and production subsidies in eight states: Alaska, California, Kentucky, Louisiana, Oklahoma, Texas, West Virginia, and Wyoming. These subsidies total more than $3 billion annually, with Texas accounting for half with $1.6 billion in subsidies in 2011 (the most recent year for which data is available), followed by Alaska with $765 million and Louisiana with $449 million.

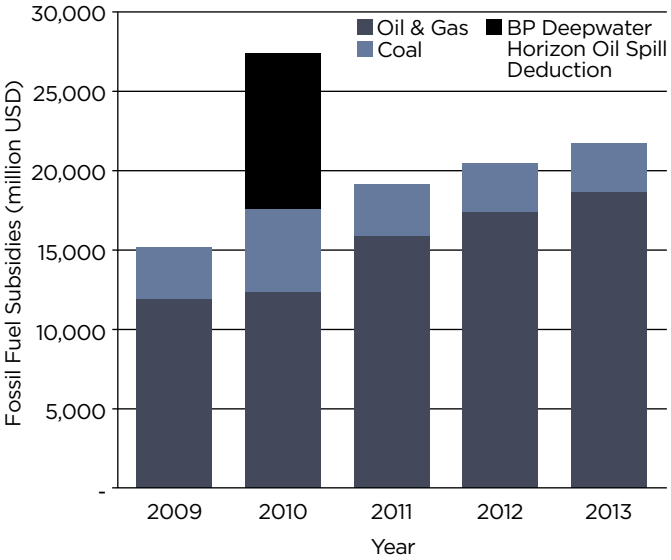
A full list of the subsidies included in the $21.6 billion total can be found in Appendix 1.

As can be seen in Figure 1, the majority of subsidies go to oil and gas, between $12 and $18.5 billion each year, while between $3 and $5.1 billion go to coal subsidies. There was a significant spike in fossil fuel subsidies in 2010 due to the tax deduction claimed by BP for clean-up costs related to its Deepwater Horizon drilling rig explosion and oil spill in the Gulf of Mexico that year, accounting for more than one-third of fossil fuel subsidies for 2010.

Figure 2 shows the extent of subsidies going to exploration and production. Subsidies that benefit both exploration and production, such as tax breaks for oil and gas drilling investments, were the largest, worth $11 billion in 2013. Subsidies that target production only, such as cheap access to government-owned land for fossil fuel production, tax breaks for oil refineries, and other benefits for fossil fuel production infrastructure were close behind, worth $9.7 billion that year. Finally, federal and state subsidies targeted specifically at promoting fossil fuel exploration were worth over $900 million.

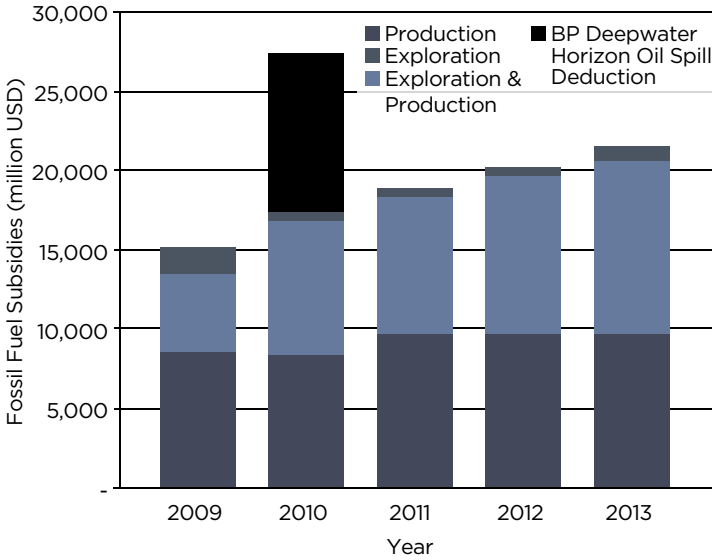
Federal only subsidies specifically targeted at exploration for new fossil fuel resources totaled $136 million in 2013, while $5 billion annually goes to subsidies aimed at oil and gas producers that in Oil Change International's judgment are used at least partly to subsidize exploration activities.

Figure 1. U.S. Federal and State Fossil Fuel Exploration and Production Subsidies, by Fuel*



*Estimates for select subsidies in this chart are from OECD data, only available through 2011. For these subsidies, 2011 data was used for 2012 and 2013. This chart includes state-level exploration and production subsidies, based on data from the OECD and valued at $3.1 billion in 2011.

Figure 2. U.S. Federal and State Fossil Fuel Exploration and Production Subsidies, by Types



2 International Energy Agency (IEA), World Energy Outlook 2012, Executive Summary, http://www.iea.org/publications/freepublications/publication/English.pdf, p. 3; Intergovernmental Panel on Climate Change, Climate Change 2013: The Physical Science Basis, Summary for Policymakers, http://www.ipcc.ch/report/ar5/wg1/docs/WGIAR5_SPM_brochure_en.pdf, p. 25; Oil Change International, Shift the Subsidies, www.shiftthesubsidies.org

3 Oil Change International, Shift the Subsidies: United States, http://www.shiftthesubsidies.org/#national-US

ALL OF THE ABOVE = MORE SUBSIDIES TO FOSSIL FUELS

In his 2014 State of the Union address, President Obama said, "The 'All the Above' energy strategy I announced a few years ago is working, and today America is closer to energy independence than we have been in decades." Throughout his presidency, President Obama has embraced this "All of the Above" strategy, which touts the increase in U.S. oil and gas production and promotes the development of "clean coal" technology.

The United States has experienced significant growth in fossil fuels during this time period: While U.S. coal production has fallen slightly since 2009, natural gas production has risen by 18 percent and oil production has grown by 35 percent in that same time (see Figure 3).[4]

It is this U.S. oil and gas boom at the heart of the "All of the Above" energy strategy that is the driving force behind the recent growth in U.S. fossil fuel subsidies.

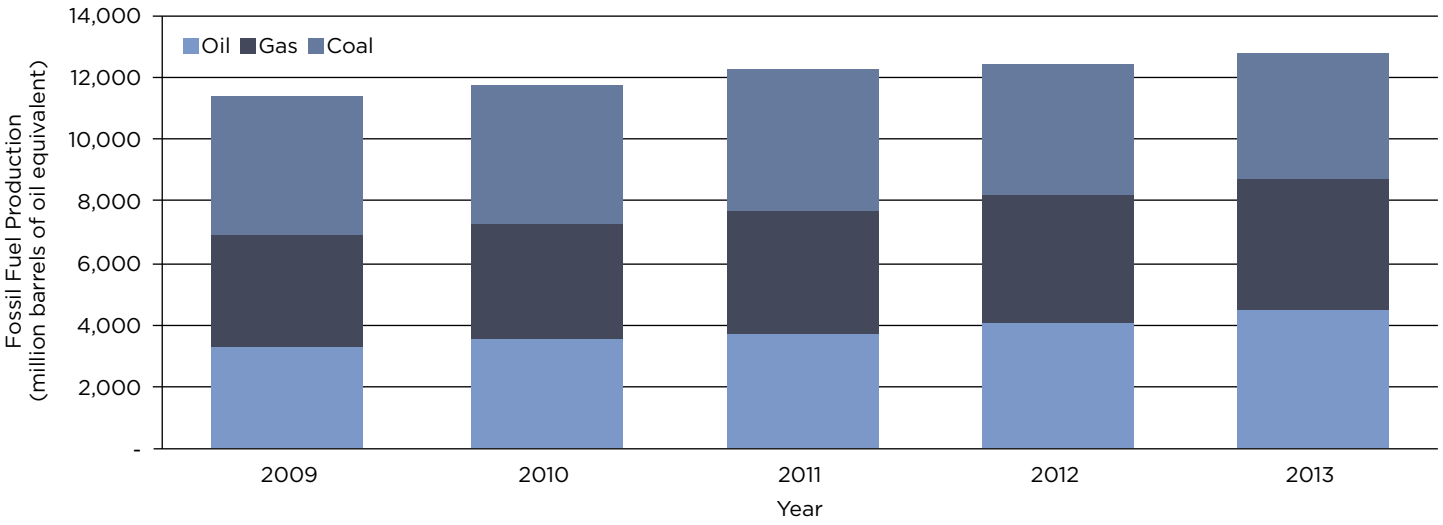
Those federal subsidies that are most closely tied to levels of oil and gas production and profits have nearly doubled under President Obama, increasing from $5.3 billion in 2009 to $10.5 billion in 2013 (see Table 1). This is because the amount the government spends on these subsidies is directly correlated to the increase in production and the expansion of the industry. The remaining federal fossil fuel subsidies increased more slowly, by 9 percent over the same period.

This increase in subsidies tied to levels of oil and gas production and profits has driven an increase in the overall value of federal subsidies to fossil fuel production and exploration. Federal fossil fuel production and exploration subsidies in the United States have risen by 45 percent since President Obama took office in 2009, from $12.7 billion to a current total of $18.5 billion.

This is surprising – and disappointing – because President Obama has been a leader both in Washington and internationally in voicing support for fossil fuel subsidy removal. The Obama Administration was a driving force behind the pledge made at the 2009 G-20 summit in Pittsburgh to phase out fossil fuel subsidies.[5]

Unfortunately, this increase in fossil fuel subsidy value is a side effect of an All of the Above energy policy that promotes increased oil and gas production.

Figure 3. U.S. Fossil Fuel Production, 2009-2013



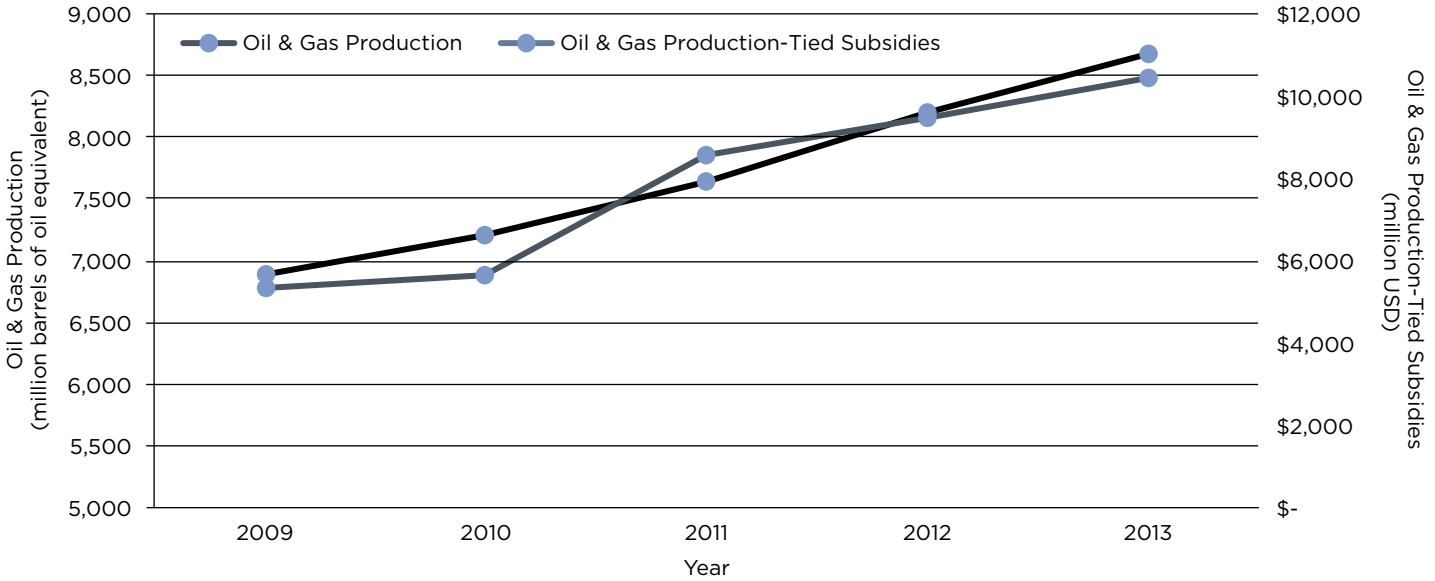
4 U.S. Energy Information Administration, International Energy Statistics, http://www.eia.gov/cfapps/ipdbproject/IEDIndex3.cfm?tid=5&pid=53&aid=1
5 The White House, The G-20 Summit in Toronto: Acting on Our Global Energy and Climate Change Challenges," June 27, 2010, http://www.whitehouse.gov/the-press-office/g-20-summit-toronto-acting-our-global-energy-and-climate-change-challenges

Table 1. Increase in U.S. Federal Oil and Gas Production-Tied Subsidies[6]

Subsidy Name & Description	Fossil Fuel Type	Subsidy Amount in 2009	Subsidy Amount in 2013 (unless otherwise noted)	Source
Corporate tax exemption for Master Limited Partnerships (MLPs) – more than three-quarters of MLPs are fossil fuel companies	Oil & Gas (small amount to coal)	$2.3 billion	$3.9 billion (2012)	Earth Track, OCI[7]
Deduction for intangible drilling costs – 100% tax deduction for costs not directly part of the final operating oil or gas well*	Oil & Gas	$1.6 billion	$3.5 billion	OMB
Lost/reduced royalties from leasing of federal lands for onshore and offshore drilling	Oil & Gas	$2.2 billion	$2.2 billion	GAO
Percentage depletion allowance –independent producers can deduct 14-15% of large investment costs from income taxes*	Oil, Gas & Coal	$340 million	$900 million	OMB
Domestic manufacturing deduction – allows oil producers to claim a tax break intended for U.S. manufacturers to prevent job outsourcing*	Oil, Gas & Coal	$605 million	$574 million	JCT[8] / OMB
Carbon dioxide (CO_2) sequestration credit – tax credit of $20 per ton of CO_2 sequestered (largely from coal plants); $10 per ton for CO_2 used for enhanced oil recovery	Coal & Oil	0	$60 million	OMB
Exemption from passive loss limitation – exempts investors from limits on deductions of losses from oil and gas activities in which they are not directly involved*	Oil & Gas	$20 million	$20 million	OMB
Deduction for tertiary injectants – allows companies to deduct the costs of fluids, gases, and other chemicals used for enhanced oil recovery from existing wells*	Oil & Gas	0	$7 million	JCT[9] / OMB
Deep gas and deep water production royalty relief – suspension of royalty payments for deepwater oil and gas production	Oil & Gas	$1 million	$1 million	CBO[10]
Total Oil and Gas Boom-Related Subsidies		**$5.3 billion**	**$10.5 billion**	

*Subsidy is marked for repeal in President Obama's Fiscal Year 2014 budget proposal.

Figure 4. U.S. Oil & Gas Production Boom and Related Subsidy Values



6 See Footnotes 6-15 for detailed source information, unless otherwise noted. "OMB" refers to U.S. Office of Management and Budget (OMB), Analytical Perspectives: Budget of the U.S. Government, http://www.gpo.gov/fdsys/browse/collectionGPO.action?collectionCode=BUDGET, "JCT" refers to Joint Committee on Taxation (JCT), Estimates of Federal Tax Expenditures, https://www.jct.gov/publications.html?func=select&id=5, "OECD" refers to Organization for Economic Cooperation and Development (OECD), OECD-IEA Fossil Fuel Subsidies and Other Support, http://www.oecd.org/site/tadffss/, ELI refers to Environmental Law Institute, Estimating U.S. Government Subsidies to Energy Sources: 2002-2008, September 2009, http://www.eli.org/sites/default/files/eli-pubs/d19_07.pdf, and "FOE" refers to Friends of the Earth, Green Scissors 2012: Cutting Wasteful and Environmentally Harmful Spending, June 2012, http://greenscissors.com/content/uploads/2012/06/GS2012-v7E.pdf.

7 Doug Koplow, Too Big to Ignore: Subsidies to Fossil Fuel Master Limited Partnerships, Earth Track and OCI, July 2013, http://priceofoil.org/content/uploads/2013/07/OCI_MLP_2013.pdf. Additional information indicates that MLPs have increased further since this study was undertaken.

8 Joint Committee on Taxation, Estimated Revenue Effects of the "Energy Advancement and Investment Act of 2007", June 14, 2007

9 2009 value of 0 based on statement that the enhanced oil recovery credit was phased out at that time in JCT, Tax Expenditures for Energy Production and Conservation, April 21, 2009

10 U.S. Congressional Budget Office (CBO), Cost Estimate: S.916 Oil and Gas Facilitation Act of 2011, August 19, 2011, http://www.cbo.gov/sites/default/files/cbofiles/ftpdocs/123xx/doc12396/s916.pdf

FOSSIL FUEL MONEY TO CONGRESS STYMIES SUBSIDY REFORM

Every year since he took office, President Obama's budget proposal has included provisions to eliminate up to $6.1 billion in annual tax preferences to the fossil fuel industry.[11] If the Obama Administration had been successful in repealing these tax breaks, overall federal fossil fuel subsidies would have declined by 2 percent since 2009 (compared with the increase of 45 percent).

While the Obama Administration's subsidy removal efforts would capture many of the most obvious and egregious subsidies to oil, gas, and coal companies, including some of the fastest growing incentives, it leaves out $12.4 billion in annual federal subsidies that directly and indirectly benefit the fossil fuel industry (see Appendix I for the complete list of current federal subsidies, totaling $18.5 billion in 2013; Appendix I also notes subsidies marked for repeal in President Obama's Fiscal Year 2014 budget proposal).

Unfortunately, even President Obama's limited fossil fuel subsidy repeal proposals have failed to pass in a divided Congress corrupted by millions of dollars from fossil fuel companies seeking to hang on to their special treatment. The fossil fuel industry buys this influence over policymakers by pouring millions of dollars into Congress every year to protect their subsidies and push for weak safety and environmental regulations.

In 2011-12, oil, gas, and coal companies spent $329 million in campaign finance contributions and lobbying expenditures.[12] This massive spending is paying off, as evidenced by the $33 billion in subsidies that went to the fossil fuel industry during those two years. Put another way, for every $1 that fossil fuel companies spent on lobbying and campaign finance contributions to Congress, it got over $100 back in subsidies – that's a more than 10,000 percent return on investment.

This cycle of money into Congress from the fossil fuel industry and money back out to the industry in the form of subsidies has stymied even modest proposals for fossil fuel subsidy reform.

11 U.S. Office of Management and Budget (OMB), Analytical Perspectives: Budget of the U.S. Government, Fiscal Years 2010-2014, http://www.gpo.gov/fdsys/browse/collectionGPO.action?collectionCode=BUDGET

12 Campaign finance data from Oil Change International, Dirty Energy Money, http://dirtyenergymoney.com/; Lobbying expenditure data from Center for Responsive Politics, Lobbying Spending Database: Oil & Gas 2012, http://www.opensecrets.org/lobby/indusclient.php?id=E01&year=2012 Note that this total does not include fossil fuel industry spending that is not publicly disclosed.

U.S. FOSSIL FUEL PRODUCTION AND EXPLORATION SUBSIDY HIGHLIGHTS

The most environmentally damaging and economically unjust subsidies in our climate-constrained world are the ones that give incentives to corporations that encourage them to increase fossil fuel production and, even worse, to find new resources to exploit. Additionally, subsidies for environmental remediation costs allow fossil fuel producers to escape accountability for their actions, encouraging them to engage in risky and polluting behavior while taxpayers foot the bill.

Worst of the Worst: Exploration Subsidies

- Exploration subsidies allow oil, gas, and coal companies to deduct costs associated with discovering new reserves from their tax payments immediately, rather than capitalizing and deducting them over the useful life of the property as would normally be required (see Table 2). Two major U.S. subsidies aimed directly at encouraging exploration totaled $136 million in 2013 alone. These are:

- **Amortization of geological and geophysical expenditures ($110 million)**: allows oil and gas companies to recover costs of seismic surveys and exploration drilling through income tax deductions.[13]

- **Expensing of exploration and development costs ($26 million)**: allows coal companies to deduct exploration costs from income tax payments.[14]

Additionally, many subsidies that are aimed at oil and gas producers are used at least partly to subsidize exploration activities. These total $5 billion each year, and include:

- **Deduction for intangible drilling costs ($3.5 billion)**: 100 percent tax deduction for costs not directly part of the final operating oil or gas well (such as labor costs, survey work, and ground clearing), including oil and gas exploration and development costs.[15]

- **Percentage depletion allowance ($900 million)**: allows independent fossil fuel producers to deduct 14 to 15 percent of large investment costs, including for exploration, from income taxes.[16]

- **Domestic manufacturing deduction ($587 million)**: allows fossil fuel producers to claim a tax break intended for U.S. manufacturers to prevent job outsourcing.[17]

In total, more than $5 billion is spent annually by U.S. taxpayers to encourage exploration and development of new fossil fuels that we cannot afford to burn. See Table 2 for a list of these subsidies.

Giving Away Federal Lands for Cheap: Production Subsidies

Most subsidies aimed specifically at promoting fossil fuel production relate to rules governing royalty payments to the U.S. government for leasing federal oil, gas, and coal-producing land. These total nearly $4 billion each year, and include:

- **Lost/reduced royalties from leasing of federal lands for onshore and offshore drilling ($2.2 billion)**: the lack of flexibility and proper assessments in royalty rate-setting for oil and gas production on federal lands costs the U.S. government billions of dollars each year.[18]

- **Low-cost leasing of coal-producing federal land ($1 billion)**: allows coal companies to lease federal land at low costs. In particular, the Powder River Basin in Wyoming and Montana is a major coal producing region but is not designated as such by the federal government, resulting in low lease rates for coal mining companies.[19]

Table 2. Major Federal Subsidies that Promote Fossil Fuel Exploration

Subsidy Name & Description	Fossil Fuel Type	Annual Subsidy Amount (most recent available estimate)	Source
Deduction for intangible drilling costs*	Oil & Gas	$3.5 billion (2013)	OMB
Percentage depletion allowance*	Oil, Gas & Coal	$900 million (2013)	OMB
Domestic manufacturing deduction*	Oil, Gas & Coal	$587 million (2013)	OMB
Amortization of geological and geophysical expenditures*	Oil & Gas	$110 million (2013)	OMB
Expensing of exploration and development costs*	Coal	$26 million (2013)	OMB

*Subsidy is marked for repeal in President Obama's Fiscal Year 2014 budget proposal.

13 OMB, Analytical Perspectives: Budget of the U.S. Government, http://www.gpo.gov/fdsys/browse/collectionGPO.action?collectionCode=BUDGET
14 Ibid.
15 Ibid.
16 Ibid.
17 Ibid.
18 U.S. Government Accountability Office (GAO), Oil and Gas Resources: Actions Needed for Interior to Better Ensure a Fair Return, December 2013, http://gao.gov/assets/660/659515.pdf; GAO, Oil and Gas Royalties: The Federal System for Collecting Oil and Gas Revenues Needs Comprehensive Reassessment, September 3, 2008, http://www.gao.gov/products/GAO-08-691
19 Tom Sanzillo, "The Great Giveaway: An analysis of the United States' long-term trend of selling federally-owned coal for less than fair market value," Institute for Energy Economics & Financial Analysis, June 2012.

Table 3. Major Federal Subsidies that Promote Fossil Fuel Production

Subsidy Name & Description	Fossil Fuel Type	Annual Subsidy Amount (most recent available estimate)	Source
Lost/reduced royalties from leasing of federal lands for onshore and offshore drilling	Oil & Gas	$2.2 billion (2013)	GAO
Low-cost leasing of coal-producing federal land	Coal	$1 billion (2011)	Institute for Energy Economics & Financial Analysis
Temporary 50% expensing for liquid fuel refining equipment	Oil	$610 million (2013)	OMB
Dual capacity taxpayer deduction	Oil & Gas	$530 million (2013)	OMB

Table 4. Major Federal Subsidies that Promote Fossil Fuel Pollution

Subsidy Name & Description	Fossil Fuel Type	Annual Subsidy Amount (most recent available estimate)	Source
Deduction for oil spill remediation costs	Oil	$679 million (2011)	JCT
Tar sands exemption from payments into the Oil Spill Liability Trust Fund	Oil	$44 million (2013)	OCI
Tax deduction for costs from clean-up and closure of coal mining and waste sites	Coal	$40 million (2013)	JCT

- **Dual capacity taxpayer deduction ($530 million)**: this makes it possible for oil and gas companies operating abroad to deduct royalty payments to foreign governments from U.S. income taxes as though they were foreign taxes.[20]

In addition, a major tax break worth $610 million in 2013 encouraged oil refineries to expand their capacity to process polluting unconventional sources of oil, including tar sands.[21] See Table 3 for a list of these subsidies.

Pollution Clean-Up Subsidies

The ability of fossil fuel companies to deduct pollution clean-up costs from their tax payments incentivizes not only increased production, but also promotes increased pollution and poor environmental stewardship by transferring the risk and expense of damages onto taxpayers. These subsidies range from tens of millions to billions of dollars each year, and include:

- **Deduction for oil spill remediation costs ($679 million)**: allows companies to deduct costs of oil spill clean-up from tax payments as a "standard business expense".[22]

The most notable example occurred in 2010 when BP claimed a $9.9 billion tax deduction due to clean-up costs for the Deepwater Horizon exploration drilling rig blowout and oil spill in the Gulf of Mexico.[23] While the absolute level of this subsidy depends on whether there are major oil spill disasters in a given year and whether companies decide to categorize them as standard business expenses, the loss of nearly $10 billion in federal revenue in one year demonstrates the huge risk of this policy.

Because the value of this deduction is considered confidential tax return

20 OMB, Analytical Perspectives: Budget of the U.S. Government, http://www.gpo.gov/fdsys/browse/collectionGPO.action?collectionCode=BUDGET
21 Ibid.
22 Joint Committee on Taxation score of H.R. 3852 of the 112th Congress bill to amend the Internal Revenue Code of 1986 to disallow a deduction for amounts paid or incurred by a responsible party relating to a discharge of oil as cited by Senator Bernie Sanders, End Polluter Welfare Act list of current subsidies, 2012, http://www.sanders.senate.gov/imo/media/doc/EPW_Act_Section_by_Section.pdf
23 Russ Britt, "BP taking $10 billion tax credit from Gulf spill, The Wall Street Journal, July 27, 2010, http://www.marketwatch.com/story/bp-taking-10-billion-tax-credit-from-spill-2010-07-27

information in most cases, it is difficult to obtain reliable annual estimates for the subsidy. However, it is clear that the potential damage is growing as oil production continues to rise and oil spills due to drilling rig, pipeline, tanker, and train accidents are becoming commonplace – a survey of 12 states with comprehensive available data found that the number of oil spills at well sites increased by 17 percent in just two years from 2010 to 2012.[24] Even more dramatically, the number of oil spills from crude oil being transported by rail increased by 10 times from 2008 to 2013.[25]

- **Tar sands exemption from payments into the Oil Spill Liability Trust Fund ($44 million)**: tar sands producers are currently exempt from paying the 8 cents per barrel tax into the fund, which is meant to provide $2 billion in resources for oil spill clean-up. Due to low revenue and draining of the fund from expensive oil spills like the 2010 BP Gulf of Mexico disaster and the Enbridge tar sands pipeline spill in Michigan, the fund's unobligated resources fall far short of this goal, at just $120 million in 2013.[26]
- **Tax deduction for coal mine clean-up costs ($40 million)**: allows coal companies to deduct expenses associated with mine closure and waste clean-up from tax payments.[27]

24 Mike Soraghan, "Oil Spills: U.S. well sites in 2012 discharged more than Valdez," EnergyWire, July 8, 2013, http://www.eenews.net/stories/1059983941
25 Andy Rowell, "Crude by Rail Spills Increased 10 Times from 2008-2013," Oil Change International, March 26, 2013, http://priceofoil.org/2014/03/26/number-crude-rail-spills-increased-10-times-2008-2013/
26 OCI, Earth Track, and Natural Resources Defense Council, "Irrational Exemption: Tar sands pipeline subsidies and why they must end," May 2012, http://priceofoil.org/content/uploads/2012/05/Irrational-exemption_FINAL_14May12.pdf; Office of Management and Budget, "Balances of Budget Authority: Budget of the U.S. Government Fiscal Year 2013," http://www.whitehouse.gov/sites/default/files/omb/budget/fy2013/assets/balances.pdf
27 Joint Committee on Taxation (JCT), Estimates of Federal Tax Expenditures, https://www.jct.gov/publications.html?func=select&id=5

ADDITIONAL SUBSIDIES TO FOSSIL FUELS

In addition to the subsidies listed above, the U.S. government provides additional support to the fossil fuel industry through bilateral financing for fossil fuel projects overseas, military expenditure to protect fossil fuel assets, and unaccounted externalities that allow fossil fuel producers to avoid bearing the public health and environmental costs of their activities. These massive expenditures are quantified and discussed below, but are not included in the total subsidy estimate due to differences in subsidy definitions and methodologies for measuring these subsidies.

In addition, the U.S. federal and state governments provide more than $11 billion each year in consumption subsidies that reduce the cost of fossil fuel energy use by end-users. Oil Change International acknowledges these as subsidies but does not focus on them in this report because they do not directly increase fossil fuel production.

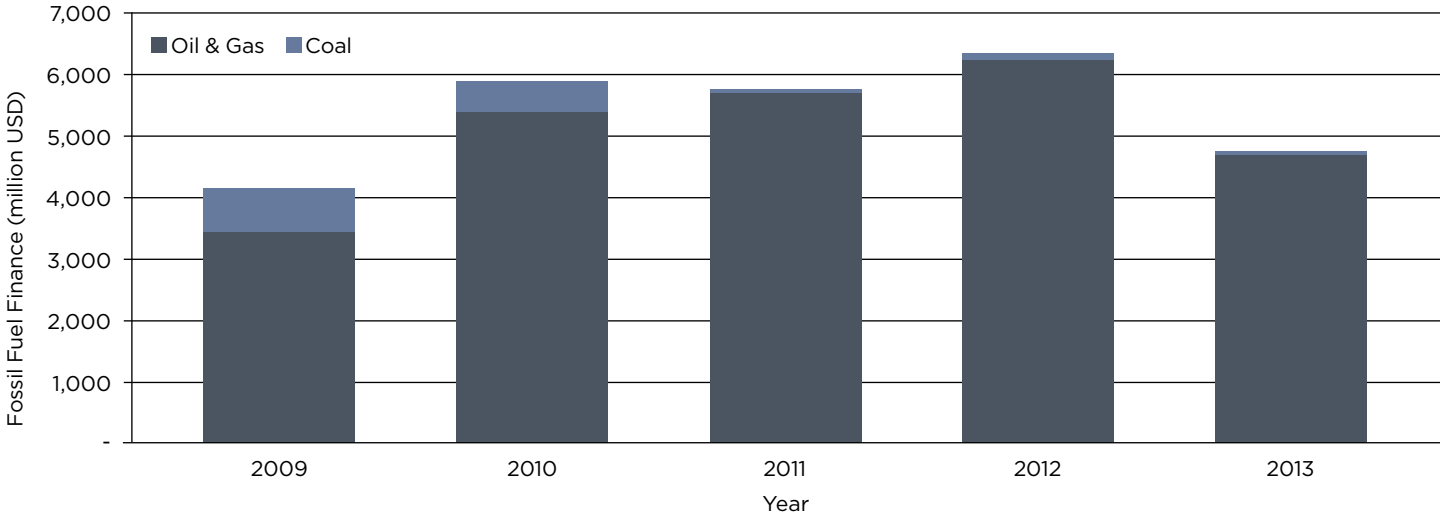
Financing Fossil Fuel Projects Overseas: $4.1 to $6.3 billion annually

In addition to subsidizing domestic fossil fuel production, the U.S. incentivizes oil, gas, and coal production overseas by providing billions of dollars in favorable financing each year to fossil fuel projects through its participation in multilateral development bank (MDB) lending as well as bilateral financing through the U.S. Export-Import Bank (ExIm) and the Overseas Private Investment Corporation (OPIC).[28] The amount of MDB fossil fuel financing attributed to the U.S. in this assessment is based on its share of overall annual funding to these banks, ranging from 9 percent in the African Development Bank to 30 percent in the Inter-American Development Bank.

Since President Obama was elected, U.S. financing of fossil fuel projects overseas through these international financial institutions (IFIs) has increased by 14 percent from $4.1 billion in 2009 to $4.7 billion in 2013 (having declined from a peak of $6.3 billion in 2012), driven by an increase in oil and gas project lending (See Figure 5). ExIm dominates U.S. overseas fossil fuel finance, accounting for 65 to 93 percent of total U.S. lending through IFIs over this period, depending on the year (See Appendix III for a full list of ExIm and OPIC fossil fuel projects).

As evidenced by the rapid growth financing, the U.S. oil and gas boom is a major driver of the Obama Administration's energy agenda overseas. Throughout its fact sheet on Power Africa, a five-year, $7 billion program launched in 2013 to expand energy access in sub-Saharan Africa, the White House repeatedly highlights oil and gas extraction as a key priority of the initiative.[29] Similarly, in 2010 the U.S. State Department launched the Unconventional Gas Technical Engagement Program (UGTEP) aimed at helping countries explore for and extract unconventional gas, especially through fracking for shale gas. UGTEP has already established shale gas programs in several countries in Latin American, Eastern Europe, South and Southeast Asia, and Africa.[30]

Figure 5. U.S. Fossil Fuel Financing through International Financial Institutions



28 The multilateral development banks included in this assessment are the World Bank Group, Inter-American Development Bank, European Bank for Reconstruction and Development, Asian Development Bank, and African Development Bank.
29 The White House, Fact Sheet: Power Africa, June 30, 2013, http://www.whitehouse.gov/the-press-office/2013/06/30/fact-sheet-power-africa
30 U.S. State Department, Unconventional Gas Technical Engagement Program (UGTEP), http://www.state.gov/s/ciea/ugtep/, site viewed May 6, 2013

Military Expenditure to Secure Oil Supply Overseas: $10.5 to $500 billion annually

The U.S. spends tens to hundreds of billions of dollars each year in military expenditures to defend overseas oil interests. A 1998 study that estimated the amount of U.S. military spending in the Persian Gulf directly attributable to defending oil supplies at $10.5 to $23.3 billion each year.[31]

A more recent 2010 Princeton University study used detailed cost accounting data from the military to assess both direct and support costs for protecting oil shipping lanes. It found that oil-related rationales are the major driver of U.S. military force in the Persian Gulf, and as a result "a very large fraction" of the $500 billion in annual defense spending in the region is oil-related.[32]

Drawing on a similar rationale that securing oil supply was the major reason for the Iraq war, a Stanford University study averaged the annual $113 billion spending on the war across the 5 billion barrels of oil imported to the U.S. every year. The resulting military expenditure premium for securing U.S. oil imports is $23 per barrel.[33]

While exact estimates of oil-related military spending vary, it is clear that oil is an important driver of U.S. military force in the Persian Gulf. Taxpayers are paying a huge unaccounted-for price for oil imports, not to mention the political destabilization and lives lost due to military force in the region – casualties of the insatiable U.S. thirst for oil.

Externalities: $350 to $501 billion annually

There are significant additional public health and environmental costs associated with the burning of fossil fuels that are borne by taxpayers that are not included in this estimate. Among the most significant are:

- Social cost of carbon: the Obama Administration has set the social cost of carbon, based on the economic impacts of climate change, at $37 per metric ton of CO_2, although many other governments and economists estimate that the cost is much higher.[34] In 2013, the U.S. emitted 5,375 million metric tons of CO_2 emissions due to fossil fuel use, which, using the Administration's value, is equal to a social cost of $199 billion.[35]

- Local pollution costs: fossil fuel production results in significant costs from local health and environmental impacts. For example, a Harvard Medical School study estimated local life cycle external costs of coal electricity alone – including public health burden in mining communities, fatalities from rail transport of coal, local air pollution, mercury impacts, and land pollution at abandoned mine sites – at $151 to $302 billion per year. (The Harvard study also estimates costs associated with greenhouse gas emissions and subsidies – not included here to avoid double counting – for total estimate of external costs of $175 to $523 billion each year).[36]

The lack of proper regulation to eliminate these impacts allows fossil fuel producers to pass on these costs to taxpayers and the general public, resulting in a huge additional subsidy to the industry.

Consumption Subsidies: $11.2 billion annually

The U.S. federal government also subsidizes fossil fuel consumption to reduce the costs of fossil energy paid by end users. These subsidies are listed in Appendix II, but are not assessed in detail or included in total fossil fuel value estimates in this assessment.

31 Douglas Koplow and Aaron Martin, "Chapter 4: Defending Oil Supplies," Fueling Global Warming: Federal Subsidies to Oil in the United States, Greenpeace, June 1998, http://www.earthtrack.net/files/library/GP%20Cover%20and%20Contents.pdf

32 Roger J. Stern, "United States cost of military force projection in the Persian Gulf, 1976–2007," Energy Policy, 2010, http://www.princeton.edu/oeme/articles/US-miiltary-cost-of-Persian-Gulf-force-projection.pdf

33 Hillard G. Huntington, "The Oil Security Problem," International Handbook on the Economics of Energy, Joanne Evans and Lester C. Hunt, eds., Edward Elgar Publishing, Cheltenham, UK, 2009, http://emf.stanford.edu/files/pubs/22452/OP62.pdf. Other subsidy experts note that the methodology of dividing military spending by U.S. oil imports only is not appropriate because Persian Gulf oil flows mostly to Asia and Europe, oil is fungible, and supply disruptions trigger price spikes globally.

34 Ben Geman, "White House revisits 'social cost of carbon'," The Hill, November 4, 2013, http://thehill.com/policy/energy-environment/189152-white-house-revises-agrees-to-seek-comment-on-%E2%80%98social-cost-of-carbon%E2%80%99

35 U.S. Energy Information Administration, "Renewables and CO_2 emissions," Short Term Energy Outlook, June 10, 2014, http://www.eia.gov/forecasts/steo/report/renew_co2.cfm

36 Paul R. Epstein, "Full Cost Accounting for the Life Cycle of Coal," Annals of the New York Academy of Sciences, Volume 1219, Ecological Economics Reviews, February 2011, pp. 73-98, http://chge.med.harvard.edu/resource/full-cost-accounting-life-cycle-coal

MOVING FORWARD: HONORING INTERNATIONAL COMMITMENTS AND PROTECTING THE CLIMATE

It is time for the U.S. to show leadership and stop rewarding the fossil fuel industry for pushing the world toward climate disaster. In 2013, U.S. greenhouse gas emissions grew by 2 percent, a shameful and dangerous rise as our window to avoid catastrophic climate change is closing fast.[37] As with every other nation on Earth, the ultimate climate goal of the U.S. is to reduce emissions to the extent necessary to limit global average temperature increase to 2°C. U.S. taxpayer support should be devoted to helping the country meet this challenge, not further funding the problem.

Ending the misguided U.S. All of the Above energy strategy should start by repealing the more than $21 billion dollars of giveaways to oil, gas, and coal companies from the U.S. government – especially those that encourage them to find and extract ever-increasing amounts of climate-damaging fossil fuel resources. Eliminating these subsidies is a vital step toward honoring the U.S. commitment to phase out inefficient fossil fuel subsidies and, even more importantly, to encourage clean, renewable energy sources that are our only chance of keeping climate change in check.

37 EIA, "U.S. energy-related CO_2 emissions in 2013 expected to be 2% higher than in 2012," January 13, 2014, http://www.eia.gov/todayinenergy/detail.cfm?id=14571&src=Environment-b1

APPENDIX I: COMPLETE LIST OF U.S. FEDERAL AND STATE FOSSIL FUEL EXPLORATION AND PRODUCTION SUBSIDIES

Oil Change International provides a complete list of U.S. fossil fuel subsidies at ShiftTheSubsidies.org. The tables below provides an overview and brief description of exploration and production incentives that make up the $18.5 billion in federal fossil fuel subsidies in 2013, and the $3.1 billion in state subsidies in 2011, as well as source information for subsidy value estimates.

U.S. Federal Fossil Fuel Exploration and Production Subsidies[38]

Subsidy Name & Description	Subsidy Type	Fossil Fuel Type	Subsidy Amount in 2013 (unless otherwise noted)	Source
Subsidies Specifically Targeted at Fossil Fuel Exploration and/or Production				
Deduction for intangible drilling costs – 100% tax deduction for costs not directly part of the final operating oil or gas well*	Exploration & Production	Oil & Gas	$3.5 billion	OMB
Lost/reduced royalties from leasing of federal lands for onshore and offshore drilling	Production	Oil & Gas	$2.2 billion	GAO
Powder River Basin not designated as a coal-producing region – allows coal companies to lease federal land at low costs	Production	Coal	$1 billion (2011)	Institute for Energy Economics & Financial Analysis
Petroleum reserves – Strategic Petroleum Reserve, Naval Petroleum and Oil Shale Reserves, and Northeast Home Heating Oil Reserve; the subsidy is due to the public provision of the reserves, rather than requiring the private sector to build and maintain stockpiles	Production	Oil	$924 million (2011)	OECD, ELI, DOE[39]
Percentage depletion allowance –independent producers can deduct 14-15% of large investment costs from income taxes*	Exploration & Production	Oil, Gas & Coal	$900 million	OMB
Deduction for oil spill remediation costs – companies can deduct costs of oil spill clean-up from income taxes	Exploration & Production	Oil	$679 million	JCT
Temporary 50% expensing for liquid fuel refining equipment – tax deduction for expansion of refineries that process oil from shale or tar sands	Production	Oil	$610 million	OMB
Domestic manufacturing deduction – allows oil producers to claim a tax break intended for U.S. manufacturers to prevent job outsourcing*	Exploration & Production	Oil, Gas & Coal	$587 million	OMB
Research & development – includes programs on oil and gas exploration and production, enhanced oil recovery, carbon capture and sequestration, coal fuels, turbine technologies	Exploration & Production	Oil, Gas & Coal	$587 million (2011)	OECD

38 See Footnotes 6-15 for detailed source information, unless otherwise noted. "OMB" refers to U.S. Office of Management and Budget (OMB), Analytical Perspectives: Budget of the U.S. Government, http://www.gpo.gov/fdsys/browse/collectionGPO.action?collectionCode=BUDGET, "JCT" refers to Joint Committee on Taxation (JCT), Estimates of Federal Tax Expenditures, https://www.jct.gov/publications.html?func=select&id=5, "OECD" refers to Organization for Economic Cooperation and Development (OECD), OECD-IEA Fossil Fuel Subsidies and Other Support, http://www.oecd.org/site/tadffss/, ELI refers to Environmental Law Institute, Estimating U.S. Government Subsidies to Energy Sources: 2002-2008, September 2009, http://www.eli.org/sites/default/files/eli-pubs/d19_07.pdf, and "FOE" refers to Friends of the Earth, Green Scissors 2012: Cutting Wasteful and Environmentally Harmful Spending, June 2012, http://greenscissors.com/content/uploads/2012/06/GS2012-v7E.pdf.

39 U.S. Department of Energy (DOE), Budget (Justification & Supporting Documents), http://energy.gov/cfo/reports/budget-justification-supporting-documents

Subsidy Name & Description	Subsidy Type	Fossil Fuel Type	Subsidy Amount in 2013 (unless otherwise noted)	Source
Subsidies Specifically Targeted at Fossil Fuel Exploration and/or Production				
Dual capacity taxpayer deduction – this allows oil and gas companies operating abroad to deduct royalty payments to foreign governments from U.S. income taxes	Production	Oil & Gas	$530 million	OMB
Amortization period for coal pollution control – allows coal-fired facilities to deduct greater levels of pollution control costs	Production	Coal	$400 million	JCT
Expensing of refinery property – oil and gas companies can deduct 50% of qualified property expenses from tax payment	Production	Oil & Gas	$400 million	JCT
Tax credit for investment in "clean coal" facilities	Production	Coal	$400 million	OMB
Waterway and harbor transport for coal	Production	Coal	$117 million	ELI[40]
Amortization of geological and geophysical expenditures – allows oil and gas companies to recover costs of seismic surveys and exploration drilling through income tax deductions*	Exploration	Oil & Gas	$110 million	OMB
Accelerated depreciation of natural gas distribution pipelines – allows natural gas companies to deduct higher levels of pipeline depreciation costs upfront	Production	Gas	$100 million	OMB
Treatment of coal royalties as capital gains – royalties to private owners of coal rights are taxed at the lower capital gains tax rate (rather than the income tax rate)*	Production	Coal	$80 million	OMB
Department of Energy loan guarantee for advanced coal projects – government loan guarantee solicitation issued in 2013 totaling $8 billion (assumed 1% risk)	Production	Coal	$80 million	DOE[41]
Carbon dioxide (CO_2) sequestration credit – tax credit of $20 per ton of CO_2 sequestered (largely from coal plants); $10 per ton for CO_2 used for enhanced oil recovery	Production	Coal & Oil	$60 million	OMB
Tar sands exemption from payments into the Oil Spill Liability Trust Fund – tar sands producers are currently exempted from paying fees into the fund	Production	Oil	$44 million	OCI
Tax deduction for costs from clean-up and closure of coal mining and waste sites	Production	Coal	$40 million	JCT
Exclusion of benefit payments to disabled coal miners from income taxes**	Production	Coal	$40 million	OMB
Expensing of exploration and development costs – oil and gas companies can deduct exploration costs from income taxes*	Exploration	Coal	$26 million	OMB

40 Environmental Law Institute, Estimating U.S. Government Spending on Coal: 2002-2010, September 2013
41 U.S. DOE, Loan Guarantee Solicitation Announcement: Federal Loan Guarantees for Advanced Fossil Energy Projects, 2013, http://energy.gov/sites/prod/files/2013/07/f2/Draft%20Advanced%20Fossil%20Solicitation.02.07.13.pdf

Subsidy Name & Description	Subsidy Type	Fossil Fuel Type	Subsidy Amount in 2013 (unless otherwise noted)	Source
Subsidies Specifically Targeted at Fossil Fuel Exploration and/or Production				
Exemption from passive loss limitation – exempts investors from limits on deductions of losses from oil and gas activities in which they are not directly involved*	Exploration & Production	Oil & Gas	$20 million	OMB
Indian coal credit – tax credit to producers of coal on Native American-owned land	Production	Coal	$20 million	JCT
Alternative fuel production credit – tax credit for producers of coke and coke gas	Production	Coal	$10 million	OMB
Natural gas and electricity exemption from bond arbitrage rules – allows state and local governments to use proceeds from tax-exempt bond sales for prepayments for natural gas and electricity, even if the discount from prepayment exceeds the bond yield (normally prohibited)	Production	Gas	$9 million	FOE
Deduction for tertiary injectants – allows companies to deduct the costs of fluids, gases, and other chemicals used for enhanced oil recovery from existing wells*	Production	Oil & Gas	$7 million	OMB
Deep gas and deep water production royalty relief – suspension of royalty payments for deepwater oil and gas production	Production	Oil & Gas	$1 million	CBO[42]
General Subsidies that Largely Benefit the Fossil Fuel Industry				
Corporate tax exemption for Master Limited Partnerships (MLPs) – more than three-quarters of MLPs are fossil fuel companies	Exploration & Production	Oil & Gas (small amount to coal)	$3.9 billion (2012)	Earth Track, OCI[43]
Last-in, first-out (LIFO) accounting – allows companies to undervalue their inventory, reducing taxable income; oil and gas companies account for about one-third of LIFO benefits*	Exploration & Production	Oil & Gas	$857 million	OMB, FOE
Tax credit and deduction for clean fuel vehicles and refueling property – includes natural gas (estimated 57% of the subsidy value), biofuels, electric charging station, and hydrogen	Production	Gas	$103 million	OMB, ELI
Total Annual U.S. Federal Fossil Fuel Exploration and Production Subsidies: $18.5 billion				

*Subsidy is marked for repeal in President Obama's Fiscal Year 2014 budget proposal.
**OCI does not recommend the repeal of this subsidy.

42 U.S. Congressional Budget Office (CBO), Cost Estimate: S.916 Oil and Gas Facilitation Act of 2011, August 19, 2011, http://www.cbo.gov/sites/default/files/cbofiles/ftpdocs/123xx/doc12396/s916.pdf
43 Doug Koplow, Too Big to Ignore: Subsidies to Fossil Fuel Master Limited Partnerships, Earth Track and OCI, July 2013, http://priceofoil.org/content/uploads/2013/07/OCI_MLP_2013.pdf

U.S. State Fossil Fuel Exploration and Production Subsidies[44]

Subsidy Name & Description	Subsidy Type	Fossil Fuel Type	Subsidy Amount in 2011
Alaska			
Alaska Gasline Inducement Act	Production	Gas	$74 million
Alternative Credit for Exploration	Exploration	Oil & Gas	$13 million
Development Credit for Certain Producers	Production	Oil & Gas	$38 million
Qualified Capital Expenditure Credit	Exploration & Production	Oil & Gas	$640 million
Alaska Total: $765 million			
California			
Percentage Depletion of Mineral and Other Resources	Exploration & Production	Oil & Gas	$23 million
California Total: $23 million			
Kentucky			
Coal Academy Mining Workforce Development	Production	Coal	$3
Coal Transportation Expense	Production	Coal	$21
Department for Energy Development and Independence	Production	Coal	$1
Excess of Percentage over Cost Depletion	Exploration & Production	Coal	$3
Mine Safety and Licensing	Production	Coal	$14
Railroad Improvement Tax Credit	Production	Coal	$3
Thin-Seam Tax Credit	Production	Coal	$2
Kentucky Total: $47 million			
Louisiana			
Excess of Percentage Over Cost Depletion	Exploration & Production	Oil & Gas	$18
Natural-Gas Severance Tax Suspension for Deep, Inactive, and Horizontal Wells	Production	Gas	$241
Oil-Deduction Severance Tax on Transportation Fees	Production	Oil	$2
Reduced Severance Tax on Incapable Oil- and Gas-Well Gas, Incapable Oil Wells, and Oil from Stripper Wells	Production	Oil & Gas	$82
Severance-Tax Exclusion for Carbon-Black Producers, Natural Gas Used in Field Operations, Flared or Vented Natural Gas, and Oil from Deep and Horizontal Wells and Tertiary Recovery	Production	Oil & Gas	$106
Louisiana Total: $449 million			

44 OECD, OECD-IEA Fossil Fuel Subsidies and Other Support, http://www.oecd.org/site/tadffss/

Subsidy Name & Description	Subsidy Type	Fossil Fuel Type	Subsidy Amount in 2011
Oklahoma			
Enhanced Oil Recovery Deduction	Production	Oil & Gas	$1.7
Excess of Percentage Over Cost Depletion	Exploration & Production	Oil & Gas	$16
Gas-Marketing Deduction Against Gross-Production Tax	Production	Gas	$30
Gross-Production Tax Exemption for O&G Owned by Government, 3D Seismic Wells, Deep and Ultra-Deep Wells, Economically-At-Risk Wells, Horizontally-Drilled Wells, and Production Enhancement	Exploration & Production	Oil & Gas	$146.1
Sales-Tax Exemption for Electricity Used in Enhanced Oil Recovery	Production	Oil	$2
Oklahoma Total: $195.8 million			
Texas			
Sales-Tax Exemption for Oil & Gas Equipment	Production	Oil & Gas	$147
Severance-Tax Exemptions for Crude Oil and Natural Gas	Production	Oil & Gas	$1.42 billion
Texas Total: $1.6 billion			
West Virginia			
Coalbed Methane Exemption	Production	Gas	$1
Exclusion of Low-Volume Oil & Gas Wells	Production	Oil & Gas	$4.4
Reduced Tax for Thin-Seamed Coal	Production	Coal	$75
West Virginia Total: $80.4 million			
Wyoming			
Advanced Conversion Technology Task Force	Production	Coal	$9
Enhanced Oil Recovery Commission	Production	Oil	$3
Wyoming Total: $12 million			
Total Annual U.S. State Fossil Fuel Exploration and Production Subsidies: $3.1 billion			

APPENDIX II: U.S. FEDERAL AND STATE FOSSIL FUEL CONSUMPTION SUBSIDIES

In addition to fossil fuel exploration and production subsidies, the U.S. federal and state governments also provide more than $11 billion each year in fossil fuel consumption subsidies. These subsidies are listed in the tables below, but are not assessed in detail or included in total fossil fuel value estimates in this assessment. All state subsidy estimate are from OECD.

Table 3. U.S. Federal Fossil Fuel Consumption Subsidies

Subsidy Name & Description	Fossil Fuel Type	Subsidy Amount in 2013 (unless otherwise noted)	Source
Highway Trust Fund – federal fund for road construction that is supposed to be supported through federal gasoline and diesel taxes; the subsidy amount reflects transfers from the U.S. Treasury's General Fund	Oil	$6 billion	CBO[45]
Low-income home energy assistance program (LIHEAP)*	Oil & Gas	$2 billion (2011)	OECD
Fuel tax exemption for farmers – exemption from federal excise tax on fuels	Oil	$1 billion (2011)	OECD
Total Annual U.S. Federal Consumption Subsidies: $9 billion			

*OCI does not recommend the repeal of this subsidy.

Table 4. State Fossil Fuel Consumption Subsidies

Subsidy Name & Description	State	Fossil Fuel Type	Subsidy Amount in 2011
Alaska Affordable Heating Program	Alaska	Oil & Gas	$0.9 million
Power Cost Equalization	Alaska	Oil	$32 million
Fuel-Tax Exemption for Aircraft Jet Fuel	California	Oil	$70 million
Fuel-Tax Exemption for Schools	California	Oil	$13 million
Sales-Tax Exemption for Diesel Used in Farming	California	Oil	$33 million
Sales-Tax Exemption for Water Common Carriers	California	Oil	$41 million
Sales-Tax Exemption for Energy Used on Farms	Colorado	Oil, Gas & Coal	$4 million
Sales-Tax Exemption for Gasoline and Special Fuel	Colorado	Oil & Gas	$215 million
Sales-Tax Exemption for Residential Use of Fuel	Colorado	Oil & Gas	$65 million
Gasoline Tax Exemptions	Kentucky	Oil	$1 million

45 CBO, Status of the Highway Trust Fund, April 24, 2013, http://www.cbo.gov/sites/default/files/cbofiles/attachments/44093-HighwayTrustFund.pdf

Subsidy Name & Description	State	Fossil Fuel Type	Subsidy Amount in 2011
Other Special-Fuels Tax Exemptions	Kentucky	Oil	$1 million
Sales-Tax Exemption for Energy and Energy-Producing Fuels	Kentucky	Oil, Gas & Coal	$28 million
Sales-Tax Exemption for Fuel Used in Farming	Kentucky	Oil	$17 million
Sales-Tax Reduction for Jet Fuel	Kentucky	Oil	$25 million
Special-Fuels Tax Exemption for Agricultural Use, Non-Highway Use, Railroad Companies, and Residential Heating	Kentucky	Oil	$69 million
Fuel-Tax Exemption on Aviation Gasoline	Louisiana	Oil	$0.1 million
Fuel-Tax Exemption on Gasoline Sales to US Government	Louisiana	Oil	$0.3 million
Sales-Tax Exclusion for Energy Used in Manufacturing	Louisiana	Gas	$7 million
Sales-Tax Exemption for Certain Fuels Used for Farm Purposes	Louisiana	Oil	$12 million
Sales-Tax Prohibition for Fuels Subject to the Motor-Fuels Tax	Louisiana	Oil	$357 million
Nonrefundable Tax Credit for the Purchase of Oklahoma-Mined Coal	Oklahoma	Coal	$4 million
Sales-Tax Exemption on Gas for Residential Use	Oklahoma	Gas	$57 million
Franchise-Tax Exemption for Agricultural Use, Emergency Vehicles, Political Subdivisions, and Truck-Refrigeration Units	Pennsylvania	Oil	$31 million
Fuel-Tax Exemption for Agricultural Use, Emergency Vehicles, and Political Subdivisions	Pennsylvania	Oil	$14 million
Sales-Tax Exemption for Coal	Pennsylvania	Coal	$120 million
Sales-Tax Exemption for Residential Utilities	Pennsylvania	Oil & Gas	$383 million
Gasoline Tax Exemptions	Texas	Oil	$63 million
Sales-Tax Exemption for Natural Gas	Texas	Gas	$294 million
Credit for Reducing Utility Charges	West Virginia	Gas & Coal	$5 million
Fuel-Tax Exemption for Aviation, Certain Off-Highway Uses, Certain Public Administrations, County Boards of Education, Dyed Diesel, and Propane	West Virginia	Oil	$176 million
Industrial Expansion and Revitalization Credit	West Virginia	Coal	$55 million
Non-Utility Sales of Natural Gas	West Virginia	Gas	$15 million
Total Annual State Consumption Subsidies: 2.2 billion			

APPENDIX III: U.S. EXPORT-IMPORT BANK AND OVERSEAS PRIVATE INVESTMENT CORPORATION FOSSIL FUEL PROJECTS

The U.S. provides billions of dollars in financing each year for overseas fossil fuel projects, much of which comes from bilateral loans and loan guarantees through the U.S. Export Import Bank (ExIm) and Overseas Private Investment Corporation (OPIC).

Notably, OPIC has instituted measures to limit greenhouse gas emissions from projects that it funds, resulting in a far smaller amount of fossil fuel financing compared to ExIm.

Table 4. U.S. ExIm Fossil Fuel Projects

Project	Country	Project Type	Fossil Fuel Type	Financing Amount (USD)
Fiscal Year 2009				
Al-Dur Power & Water Project	Bahrain	Production	Gas	$229 million
Pemex Exploration and Production and Cantarell oil fields	Mexico	Exploration & Production	Oil	$150 million
Oil and Gas Field Development	Mexico	Exploration & Production	Oil & Gas	$1.2 billion
Oil and Gas Drilling	Mexico	Exploration & Production	Oil & Gas	$36.3 million
Oil Exploration Services	Nigeria	Exploration & Production	Oil & Gas	$17.2 million
West Bengal Oil and Gas Drilling	India	Production	Oil & Gas	$47.8 million
Saudi Electricity Company Power Plants	Saudi Arabia	Production	Gas	$912.8 million
Samsun Combined Cycle Power Plant A	Turkey	Production	Gas	$104.8 million
Combined Cycle Gas Power Plant in Turkey	Turkey	Production	Gas	$470,914
2009 Total: $2.7 billion				
Fiscal Year 2010				
Oil and Gas Drilling	Mexico	Exploration & Production	Oil & Gas	$1 billion
Incheon Plant Expansion	Korea	Production	Gas	$134.2 million
Combined Cycle Gas Power Plant in Turkey	Turkey	Production	Gas	$34 million
Port Moresby Power Grid Development Project	Papua New Guinea	Production	Gas	$800 million
Oil Refinery	Israel	Production	Oil	$302.2 million
Port Moresby Power Grid Development Project	Papua New Guinea	Production	Gas	$2.2 billion
Gas Pipeline	Russia	Production	Gas	$46.1 million
2010 Total: $5.2 billion				

Project	Country	Project Type	Fossil Fuel Type	Financing Amount (USD)
Fiscal Year 2011				
Pemex onshore and offshore projects	Mexico	Exploration & Production	Oil & Gas	$1 billion
Offshore Drilling in Nigeria	Nigeria	Production	Oil & Gas	$20 million
PANUCO Offshore Drilling Rig	Mexico	Exploration & Production	Oil & Gas	$128 million
Cartagena Oil Refinery	Colombia	Production	Oil	$500 million
Aydin 62 MW Combined Cycle Gas Power Project	Turkey	Production	Gas	$37.4 million
Centro Cogeneration Gas Power Plant	Mexico	Production	Gas	$75.3 million
Combined Cycle Gas Power Plant in Turkey	Turkey	Production	Gas	$463,920
Samalkot Gas Power Plant	India	Production	Gas	$585.6 million
Cartagena Oil Refinery	Colombia	Production	Oil	$2.3 billion
Ecopetrol operations	Colombia	Production	Oil	$460 million
Natural Gas Power Plant	India	Production	Gas	$74.3 million
2011 Total: $5.2 billion				
Fiscal Year 2012				
Kemerovo (Siberia) Coal Mining	Russia	Production	Coal	$66.3 million
Bursa Combined Cycle Gas Power Plant	Turkey	Production	Gas	$66.5 million
Pemex Projects	Mexico	Exploration & Production	Oil & Gas	$1.2 billion
Offshore Drilling in Mexico	Mexico	Exploration & Production	Oil & Gas	$131.6 million
Combined Cycle Gas Power Plant in Turkey	Turkey	Production	Gas	$121.5 million
Qurayyah Independent Power Project	Saudi Arabia	Production	Gas	$548 million
Samalkot Gas Power Plant	India	Production	Gas	$2.2 million
Australia Pacific LNG Processing Plant	Australia	Production	Gas & Coal	$2.9 billion
Cartagena Oil Refinery	Colombia	Production	Oil	$371.7 million
2012 Total: $5.4 billion				

Project	Country	Project Type	Fossil Fuel Type	Financing Amount (USD)
Fiscal Year 2013				
Australia Pacific LNG Processing Plant	Australia	Production	Gas & Coal	$8
Queensland Curtis LNG Plant	Australia	Production	Gas & Coal	$1.8 billion
Pemex Projects	Mexico	Exploration & Production	Oil & Gas	$1.5 billion
Oil Drilling Equipment in Nigeria	Nigeria	Exploration & Production	Oil	$25.7 million
Gas Turbines for Wood Industry	Russia	Production	Gas	$14.8 million
Petroleum Refining Services	Russia	Production	Oil	$32.3 million
Abener Energia Gas Turbines	Spain	Production	Gas	$79.4 million
Star Rafineri Oil Refinery Equipment	Turkey	Production	Oil	$640 million
Steam Turbine Generators for Aluminum Plant	United Arab Emirates	Production	Unspecified	$240 million
BG Energy Holdings Gas Turbines	United Kingdom	Production	Gas	$36.8 million
2013 Total: $4.4 billion				
Total 2009-2013 Exim Fossil Fuel Financing: $22.2 billion				

Table 4. U.S. OPIC Fossil Fuel Projects

Project	Country	Project Type	Fossil Fuel Type	Financing Amount (USD)
Fiscal Year 2009				
Palagua Oil Field Drilling	Colombia	Exploration & Production	Oil & Gas	$10.8 million
Lomé Tri-Fuel Thermal Power Plant	Togo	Production	Oil & Gas	$171.8 million
2009 Total: $182.6 million				
Fiscal Year 2011				
Palagua Oil Field Drilling	Colombia	Exploration & Production	Oil & Gas	$24.4 million
Oil and Gas Drilling	Mexico	Exploration & Production	Oil & Gas	$10 million
2011 Total: $34.4 million				
Fiscal Year 2012				
Heavy Fuel Oil Power Plant	Jordan	Production	Oil	$270 million
2012 Total: $270 million				
Fiscal Year 2013				
Heavy Fuel Oil Power Plant	Jordan	Production	Oil	$48.6 million
Oil Drilling Expansion	Colombia	Exploration & Production	Oil	$19 million
2013 Total: $67.6 million				
Total 2009-2013 OPIC Fossil Fuel Financing: $555 million				

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