The United States Extractive Industries Transparency Initiative

2015 Executive Summary Report

SEPTEMBER 2nd DRAFT

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INTRODUCTION

In 2011, the U.S. joined the Open Government Partnership (OGP), a global platform for participating countries dedicated to making governments more open, accountable, and responsive to citizens. As part of the 2011 OGP National Action Plan, the U.S. sought to improve the transparency of the extractive industries for U.S. citizens, and to manage public resources—specifically natural resources on federal lands and waters—more effectively by joining the Extractive Industries Transparency Initiative (EITI). In 2013, the U.S. restated this commitment in the second OGP National Action Plan.

The EITI is a global standard that promotes "open and accountable management of natural resources."[1] The EITI International Board and implementing member countries believe that a nation's natural resource wealth belongs to its citizens. Through increased transparency and accountability, the EITI can increase public trust and dialogue, improve governance, attract investment, and manage and enhance growth so that citizens receive financial and societal benefits from a country's natural resources.

Since 2003, international representatives from government, industry, and civil society have developed and evolved the EITI Principles. These principles are the cornerstone of the initiative, endorsed by all EITI stakeholders:

1. We share a belief that the prudent use of natural resource wealth should be an important engine for sustainable economic growth that contributes to sustainable development and poverty reduction, but if not managed properly, can create negative economic and social impacts.
2. We affirm that management of natural resources wealth for the benefit of a country's citizens is in the domain of sovereign governments to be exercised in the interests of their national development.
3. We recognize that the benefits of resource extraction occur as revenue streams over many years and can be highly price dependent.
4. We recognize that a public understanding of government revenues and expenditure over time could help public debate and inform choice of appropriate and realistic options for sustainable development.
5. We underline the importance of transparency by governments and companies in the extractive industries and the need to enhance public financial management and accountability.
6. We recognize that achievement of greater transparency must be set in the context of respect for contracts and laws.
7. We recognize the enhanced environment for domestic and foreign direct investment that financial transparency may bring.
8. We believe in the principle and practice of accountability by government to all citizens for the stewardship of revenue streams and public expenditure.
9. We are committed to encouraging high standards of transparency and accountability in the public life, government operations and in business.
10. We believe that a broadly consistent and workable approach to the disclosure of payments and revenues is required which is simple to undertake and to use.
11. We believe that payments' disclosure in a given country should involve all extractive industry companies operating in that country.
12. In seeking solutions, we believe that all stakeholders have important and relevant contributions to make – including governments and their agencies, extractive industry companies, service companies, multilateral organizations, financial organizations, investors, and governmental organizations.

[1] Extractive Industries Transparency Initiative, https://eiti.org/eiti.

To increase transparency and accountability, the EITI relies on a cross sector partnership between government (agencies that oversee extraction in the U.S.), industry (companies operating in the extractive industries), and civil society (individuals and organizations that represent community and citizen interests). Together, all three sectors make up the Multi-Stakeholder Group (MSG) responsible for overseeing the EITI. An Independent Administrator (IA) also assists in implementing the EITI Standard. Later, a Validator commissioned by the International Secretariat assesses whether or not the country successfully implemented the EITI Standard.

To implement the EITI, sectors collaborate in a disclosure process regarding natural resource revenues, called reconciliation. Government, industry, and civil society develop a framework for the reconciliation. Government and industry share with the IA the total amount of revenues government received and industry paid in a given year. The IA reconciles reported revenues, and investigates any discrepancies. The public can see the results in an annual EITI report, which includes a contextual narrative of the legal and fiscal regime in that country. At the time of this report, there are 48 EITI-implementing countries, 31 of which have achieved the EITI Standard.

This summary is just a fraction of the 2015 USEITI Report. The U.S. has developed a more extensive online report to improve public engagement and access. Visit the interactive online report at http://eiti-dev.18f.gov/. There, you can:

- Explore maps and charts of extractive industries economic and revenue data
- Compare government receipts and company payments
- Read 12 county case studies on specific industries' history and geology, production, employment, revenues, and fiscal costs
- Download relevant data sets
- Conducted a curated search for additional data and information
- Discuss and participate in USEITI

What natural resources do we have in the US?

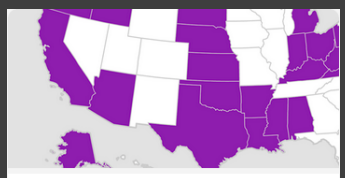
[This will be the U.S. natural resources sectors overview from the written report with high-level info on all land types. It will also have interactive charts based on Federal data, such as the pie chart on the current beta site.]

Find out more ›

What are the impacts on communities like yours?

In some communities, extractive industries play a much larger role than in others. Read here about twelve communities that, over the last decade, have led U.S. counties in production of one of the following resources: iron, copper, gold, coal, oil, and natural gas.

View the case studies ›



How much do these resources contribute to our economy?

[This section will be another way to 'enter' the map/chart visualization, but will instead of showing maps first, will show charts first to get at more of the comparative views.]

Compare resources ›

Read public comments submitted during the USEITI process:

Public comments from the USEITI application development process

Public comments from MSG meetings in minute notes

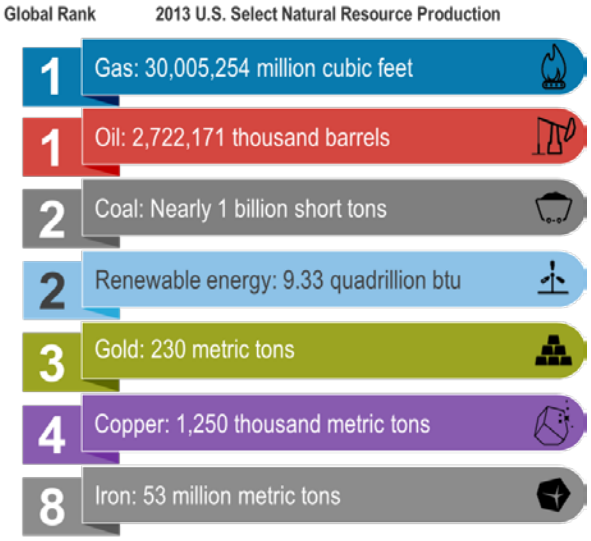
To see the USEITI 2015 Work Plan, please visit here

In the U.S., the Secretary of the U.S. Department of the Interior (DOI) leads U.S. Extractive Industries Transparency Initiative (USEITI) implementation. In December of 2012, the Secretary of the Interior formed the MSG with 22 members and 21 alternates from government, industry, and civil society organizations to guide and oversee the USEITI. On December 19, 2013, the U.S. submitted an application to participate to the EITI International Board. The MSG developed this application after engaging stakeholders around the country and virtually through webinars, and a two month public comment period in the fall of 2013. On March 19, 2014, the board accepted the U.S. as a candidate EITI country. In the summer of 2014, DOI also selected an IA for the USEITI, Deloitte & Touche LLP.

U.S. Extractive Industries and the USEITI

The U.S. is a world leader in producing natural resources including oil, gas, coal, renewable energy, and non-energy minerals.

2013 U.S. Global Rank and Production Totals for Select Natural Resources Compared to other Countries in the World[2]



[2] Production totals are for all lands in the U.S., not just lands owned by the federal government. Gas production total from U.S. Energy Information Administration (EIA), http://www.eia.gov/dnav/ng/ng_prod_sum_dcu_NUS_a.htm; Oil production total from EIA, http://www.eia.gov/dnav/pet/pet_crd_crpdn_adc_mbbl_a.htm; Information regarding global ranks for oil and gas production in 2013 and other years from EIA, http://www.eia.gov/todayinenergy/detail.cfm?id=20692; Coal production total from EIA, http://www.eia.gov/coal/production/quarterly/pdf/t1p01p1.pdf; While the EIA has yet to publish global coal production data for 2013, the U.S. ranked second after China in 2012 according to this source. Other sources, such as the World Coal Association, state that this ranking remained unchanged in 2013, http://www.worldcoal.org/resources/coal-statistics/; Renewable production total from EIA, http://www.eia.gov/totalenergy/data/monthly/index.cfm#summary; Information about U.S. renewable energy production capacity globally from Renewable Energy Policy Network for the 21st Century, "Renewables 2014 Global Status Report," http://www.ren21.net/Portals/0/documents/Resources/GSR/2014/GSR2014_full%20report_low%20res.pdf; Gold production total from U.S. Geological Survey (USGS), http://minerals.usgs.gov/minerals/pubs/commodity/gold/mcs-2015-gold.pdf; Copper production total from USGS, http://minerals.usgs.gov/minerals/pubs/commodity/copper/mcs-2015-coppe.pdf; Iron production total from USGS, http://minerals.usgs.gov/minerals/pubs/commodity/iron_ore/mcs-2015-feore.pdf.

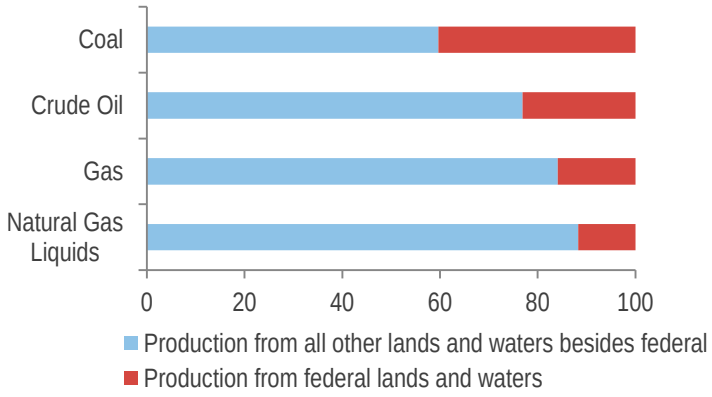
In the U.S., federal, state, and local governments develop laws and regulations to govern natural resource management and extraction. The public has opportunities to participate through:

- Voting in elections
- Commenting during the rule making process when the executive branch develops regulations to implement laws passed by the legislative branch
- Engaging with government at all levels during the land use planning and natural resource leasing processes

There are notable differences between the U.S. and other EITI countries. Whereas in many countries natural resources belong chiefly to the national government, in the U.S., individuals or corporations—in addition to federal, state, local, or tribal governments—own substantial natural resource wealth. The U.S. also has 50 states, 3,000 counties, and over 560 tribes. All of these different jurisdictions and governments develop their own legal and fiscal frameworks to govern extractive industries.

Given that many different entities own and govern natural resources in the U.S., the MSG focused the 2015 USEITI Report on extractive industries revenues stemming from production on federal lands and waters. This is a small proportion of extractive industries' activities in the U.S. In FY 2013, 40.3% of coal, 23.1% of crude oil, 15.9% of natural gas, and 11.7% of natural gas liquids extraction in the country took place on federal lands or waters.[3]

FY 2013 Percent of Production Occurring on Federal vs. Non-federal Lands and Waters for Select Natural Resources in the U.S.[4]



[3] U.S. Energy Information Administration, "Sales of Fossil Fuels Produced from Federal and Indian Lands, FY2003 – FY2014," July 2015, http://www.eia.gov/analysis/requests/federallands/pdf/eia-federallandsales.pdf
[4] Ibid.

These natural resources located on federal lands and waters—though a fraction of the total resources in the U.S.—belong to all U.S. citizens. This makes their accountable governance and transparent revenue management an important issue for the public.

In future years, the MSG plans to expand from this focus on federal lands and waters to project-level, sub-national, and tribal accountability and transparency. The U.S. received permission from the International Secretariat for adapted implementation regarding rule 4.2d for sub-national revenue payments.[5] [6] While this year's online report includes links [insert link] to publicly-available information about state revenue collection for extractive industries, next year the MSG will continue to encourage more states and tribes to directly participate in the USEITI through a three tiered opt-in process: (1) establishing a USEITI government point of contact, (2) appointing a member of the government to the USEITI MSG, and (3) helping to integrate legally available data into the contextual narrative. Currently government representatives from the states of California and Wyoming, as well as from the Shoshone and Arapaho tribes serve on the MSG. The MSG has also addressed sub-national accountability and transparency in this year's report by developing 12 county case studies depicting the impact of specific extractive industries on local communities' economies and local governments' coffers, using publicly-available online data.

U.S. Extractive Industries Revenues and Reconciliation

Through a unilateral disclosure, the government published payment amounts by revenue stream and company online, reporting a total of $14.4 billion in revenues paid to the Office of Natural Resources Revenue (ONRR) within DOI.[7]

[5] Requirement 4.2 D states that "It is required that the multi-stakeholder group establish whether direct payments, within the scope of the agreed benefit streams, from companies to sub-national government entities are material. Where material, the multi-stakeholder group is required to ensure that company payments to sub-national government entities and the receipt of these payments are disclosed and reconciled in the EITI Report," EITI Standard, https://eiti.org/document/standard

[6] Under Phase I of USEITI's implementation of rule 4.2d, publicly-available information about state extractives revenue collection will be included in the USEITI reports. Many states already provide extensive information about their extractive revenues via state websites and other reporting. However, this information was previously dispersed among a large number of state-specific websites and other information repositories. It has been, therefore, difficult for the public to access and compare data from multiple states. This data is collected and included in a more accessible manner in the USEITI online report. [insert link]

[7] Office of Natural Resources Revenue, Statistical Information, http://statistics.onrr.gov/ReportTool.aspx

Extractive industries companies made additional payments to the Internal Revenue Service (IRS) on their annual corporate income tax liability. The MSG defined the parameters for reconciliation along the following lines:

Companies, Government Agencies, and Revenues Included in the Reconciliation

Companies	Government Agencies, Bureaus, & Offices	Revenue Streams
45 companies who reported at least $50 million in revenue to ONRR	DOI's Office of Natural Resources Revenue (ONRR)	Bonuses
		Rents
		Royalties
		Other revenues
		Offshore Inspection Fees
		Civil Penalties
	DOI's Bureau of Land Management (BLM)	Bonus & First Year Rent
		Permit Fees
		Renewable Energy Collections
	DOI's Office of Surface Mining Reclamation and Enforcement (OSMRE)	Abandoned Mine Lands (AML) Fees Including Audits and Late Charges
		Civil Penalties Including Late Charges
	Internal Revenue Service (IRS)	Corporate Federal Income Tax Payments

IA Recommendations and Next Steps

With the 2015 USEITI Report, the MSG laid a strong foundation for EITI implementation to build on in subsequent years. In addition, the IA made recommendations to the MSG for future improvements. The complete list of recommendations is available starting on page 66 of this report. At a high level, the recommendations include:

- Revisiting which companies, commodities, and revenues to include to more thoroughly establish the comprehensiveness of the reconciliation
- Increasing company outreach to encourage and improve participation
- Proposing to the International Secretariat more cost-effective reconciliation approaches
- Enhancing the online report and developing additional state and local contextual information to drive public engagement

The MSG is committed to continuously improving USEITI implementation in subsequent years to provide U.S. citizens with greater transparency and accountability regarding natural resource management and revenues.

NATURAL RESOURCES IN THE U.S.

Which natural resources are extracted in the U.S.? Where is extraction and exploration taking place?

The U.S. is home to many different natural resources, including fossil fuel, renewable energy, and non-energy mineral resources. Since the 19th century, natural resource extraction has been a major industry in the U.S., with fluctuations throughout time.

This first USEITI Report focuses on natural resources the MSG prioritized: energy resources, including both fossil fuels (oil, gas, and coal) and renewable energy sources (geothermal, solar, and wind), as well as non-energy mineral resources (gold, copper, and iron). Future reports may include other resources, such as forests.

Fossil Fuels

The Energy Information Administration's (EIA) U.S. Energy Mapping System helps to visualize the U.S. supply of the many of the natural energy resources discussed below.

Fossil fuels are the main source of electricity in the U.S., as well as the primary fuel for powering motor vehicles and heating homes. Fossil fuel sources comprised approximately 80% of total U.S. energy consumption in 2013.[8] Besides creating energy, these natural resources are also used to make many products. For example, manufacturers use oil to make asphalt and coal to make steel. There are three main fossil fuels: oil, gas, and coal. Through natural processes over hundreds of millions of years, plant and animal matter becomes energy resources in the form of fossil fuels. While they are abundant, they are not renewable.

Oil forms in underground reservoirs on land and under the ocean. Crude oil occurs naturally, while petroleum products (e.g., jet fuel, diesel fuel, and heating oil) come from refining and otherwise processing crude oil and other liquids. Petroleum is a broad term that can mean both crude oil and petroleum products. In 2013, five states—Texas, North Dakota, California, Alaska, and Oklahoma—and federal waters in the Gulf of Mexico supplied more than 80% of the crude oil produced in the U.S.

[8] U.S. Energy Information Administration, "Monthly Energy Review," Table 1.3 and 10.1, May 2014, http://www.eia.gov/totalenergy/data/monthly/

Gas, also often called natural gas, forms on land underground and offshore in beds under the ocean. There are two types of natural gas: "dry" and "wet." Dry natural gas is mostly methane. Wet natural gas contains a smaller amount of methane, as well as other liquid hydrocarbons (e.g., ethane, propane, and butane) and non-hydrocarbon gases. Wet natural gas is the source of natural gas liquids. Once wet natural gas is extracted from the ground, natural gas liquids are separated from the gas stream close to the well or at a gas processing plant. This leaves both dry gas and natural gas liquids such as ethane, propane, and butane. The U.S. produces more gas than any other country in the world. Five states produce almost 66% of the total dry natural gas in the U.S.: Texas, Pennsylvania, Louisiana, Wyoming, and Oklahoma.

Natural Resource Spotlight: Helium

Helium is a non-renewable resource, typically extracted from natural gas deposits, with a variety of uses in the scientific, medical, technological, and defense industries. In 2014, the federal government generated $215 million in helium revenues.

After World War I, the federal government created the federal helium program to ensure a dependable helium supply for defense-related purposes, and remained the sole domestic producer of helium for decades. In 1960, the government began offering incentives for private companies to separate helium from natural gas and sell it back to the government for research and stockpiling purposes. As private demand outstripped public need, the helium industry was privatized in 1996 and BLM was charged with selling stockpiled helium to private refiners. BLM is committed to ensuring a smooth transition to private helium production as federal reserves are drawn down.

9

In conventional extraction, companies extract oil and gas by drilling a vertical well. At first, oil and gas rise to the surface of the well fueled by underground pressure. Once the pressure gives out, operators can inject gases or water from the initial drilling back into the formation to increase pressure and push additional resources to the surface, or install pumps to help provide artificial lift for oil production. Finally, operators can inject steam, gases, or other chemicals into the formation to change the oil's composition so that it can more easily rise through the well.

Extraction methods for oil and gas changed significantly starting in the early 2000s, with new applications of horizontal drilling and hydraulic fracturing. These methods made extracting oil and gas deep below the surface of the earth trapped in almost impermeable shale rock formations profitable for industry. Horizontal drilling creates lateral wells for oil and gas to flow through. Hydraulic fracturing pumps water, sand, and chemicals into the earth to fracture the shale

Additional information about shale gas can be found in the U.S. Department of Energy's 2009 report "Modern Shale Gas Development in the United States: A Primer"

[9] Office of Natural Resources Revenue, "Statistical Information," http://statistics.onrr.gov/ReportTool.aspx

rock so that natural gas and oil can flow through the cracks into the well and then to the surface.

In the past decade, these changing extraction methods and rising natural gas prices have made shale oil and gas increasingly attractive to industry. Major oil and gas shale rock formations in the U.S. include the Permian, Haynesville, and Eagle Ford Regions mostly in Texas; the Marcellus Region in West Virginia, Pennsylvania, and New York; the Niobrara Region in Wyoming and Colorado; and the Bakken Region in North Dakota and Montana.

The Green River Formation, which is located at the intersection of Colorado, Utah, and Wyoming is estimated to house between 1.2 and 1.8 trillion barrels of shale oil. In shale gas, the Marcellus Play (spanning nine states from New York to Tennessee) is the largest shale gas play, accounting for 75% of natural gas production growth.[10] To see where oil and gas resources exist currently, as well as where exploration is taking place, visit the following:

- A map of different types of oil and gas in the U.S. here
- A map of current and prospective shale plays in the U.S. here
- A map of undiscovered, technically recoverable gas resources here

Coal forms in the ground in coal seams or beds. Miners extract coal from the ground through surface mining—where they break the surface by explosives before fracturing and removing the coal—and underground mining—where they remove the coal from underground "rooms" or sever and remove an entire section of the underground coal seam. In 2013, the U.S. was the world's second largest coal producer after China. In the U.S., coal is concentrated in three regions: the Appalachian Region, the Interior Region, and the Western Region. In recent years, the Western Region—most of which is the Powder River Basin—produces more than half of U.S. coal.[11]

Proved coal reserves estimate the quantity of coal that can be mined from existing reserves at active mines. From 2012 to 2013, proved reserves in the U.S. increased by 5.8%.[12]

Maps and information about where the U.S. gets its coal can be found here. Information about and a map of coal reserves can be found here.

[10] U.S. Energy Information Administration, Siemenski, Adam, "Outlook for U.S. Shale Oil and Gas" 4 Jan 2014, http://www.eia.gov/pressroom/presentations/sieminski_01042014.pdf
[11] U.S. Energy Information Administration, "Coal Explained: Where Our Coal Comes From," http://www.eia.gov/Energyexplained/index.cfm?page=coal_where
[12] U.S. Energy Information Administration, "Table 14. Recoverable Coal Reserves and Average Recovery Percentage at Producing Mines by State, 2013 and 2012," http://www.eia.gov/coal/annual/pdf/table14.pdf

What are reserves?

There are three common types of reserves, or the amount of a particular natural resource available for extraction:

- *Proved reserves* are the estimated volumes of a natural resource that geologic and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions
- *Technically recoverable resources* include all of the natural resource that can be produced based on current technology, industry practice, and geologic knowledge
- *Economically recoverable resources* are the portion of technically recoverable natural resources that can be profitably produced

Renewable Energy Resources

Renewable energy resources include geothermal, solar, wind, biomass, and hydrokinetic energy, which constitute growing sources of environmentally sustainable energy to meet the country's electricity needs. Renewable energy sources comprised approximately 10% of total U.S. energy consumption in 2013.[13] This year's report features geothermal, solar, and wind.

Geothermal energy comes from the earth's heat, captured as steam or hot water, and converted into energy. Most geothermal resources are found along the boundaries of tectonic plates and manifest themselves as volcanoes, hot springs, or geysers. California produces more geothermal energy than any other state, accounting for over 75% of the country's total geothermal output in 2013.[14]

Many sites for potential geothermal development are on federal land; currently, about 40% of all electricity generated from geothermal resources comes from federal land. In addition to these known sources, advances in extraction methods and technology could result in new sources of geothermal energy.

A map focused on the production of geothermal energy can be seen here.

Solar energy can be generated in two ways: either by converting solar radiation into heat and electricity via photovoltaic panels, or by using the sun's radiation to heat a fluid to produce steam for a power generator. California leads the

[13] U.S. Energy Information Administration, "Monthly Energy Review," Table 1.3 and 10.1, May 2014, http://www.eia.gov/totalenergy/data/monthly/
[14] U.S. Energy Information Administration, "Today in Energy," 8 Sept 2014, http://www.eia.gov/todayinenergy/detail.cfm?id=17871

production of solar energy, followed by New Jersey.[15] As of 2014, California is the first state to receive 5% or more of electricity from solar energy sources.[16]

The solar industry has experienced rapid growth in the past decade due to increased public awareness of its environmental benefits, decreasing technology costs, and government programs. Manufacturing costs for solar panels have decreased by 80%,[17] and private industry has created better batteries to store solar energy. In the Southwestern U.S., solar radiation levels are some of the best in the world for solar energy production. Currently, there are 70 pending applications to develop solar energy projects on federal lands in the U.S.[18]

A map illustrating areas of the U.S. with solar energy potential can be seen here.

Wind power takes advantage of daily wind cycles to rotate wind turbines, which can be clustered together on wind farms. In 2013, wind power accounted for over 4% of total U.S. energy production, with more than 61 gigawatts (GW) installed across 39 states.[19] Texas (12.3 GW), California (5.8 GW), and Iowa (5.2 GW) are the leading producers.[20]

No offshore wind projects in the U.S. have been completed to date. The National Renewable Energy Laboratory estimates that there is enough wind off the West Coast to generate four times the electricity held by the U.S. grid in 2012. While wind speeds off the Atlantic Coast and in the Gulf of Mexico are lower than in the Pacific, the presence of shallower waters in the Atlantic makes developing wind projects there more affordable in the short term.[21] To date, the Bureau of Ocean Energy Management (BOEM) has issued nine commercial wind energy leases on the Atlantic Outer Continental Shelf, including those offshore of Delaware, Maryland, Massachusetts, Rhode Island, and Virginia.[22] BOEM expects to hold lease sales for areas offshore of New Jersey and North Carolina in the near future and is considering a number of other commercial wind energy planning areas.[23]

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[15] Bureau of Labor Statistics, Hamilton, James, "Careers in Solar Power," http://www.bls.gov/green/solar_power/
[16] U.S. Energy Information Administration, "California first state to generate more than 5% of electricity from utility-scale solar," 24 March 2015, http://www.eia.gov/todayinenergy/detail.cfm?id=20492
[17] CNBC, "Like Shale Oil, Solar Power is Shaking Up Global Energy," 26 April 2015, http://www.cnbc.com/id/102621070
[18] Bureau of Land Management, "Solar Energy," http://www.blm.gov/wo/st/en/prog/energy/solar_energy.html
[19] U.S. Department of Energy, "Wind Vision: A New Era for Wind Power in the United States," http://www.energy.gov/sites/prod/files/wind_vision_highlights.pdf
[20] Ibid.
[21] Bureau of Ocean and Energy Management, "Offshore Wind Energy," http://www.boem.gov/renewable-energy-program/renewable-energy-guide/offshore-wind-energy.aspx
[22] To learn more about BOEM renewable wind energy leases, visit: http://www.boem.gov/Lease-and-Grant-Information/
[23] For information about North Carolina offshore wind development, visit: http://www.boem.gov/state-activities-north-carolina/. For information about New Jersey offshore wind development, visit: http://www.boem.gov/State-Activities-New-Jersey/.

A map of the wind power capacity currently installed in the U.S. can be seen here.

Non-energy Minerals

Non-energy minerals found in the U.S. include base and precious metals, industrial metals, and gemstones, amongst other minerals. The 2015 USEITI Report focuses on non-energy minerals, specifically gold, copper, and iron. In 2013, these minerals accounted for most of the valuable metal produced in the U.S.: gold, copper, and iron made up 32%, 29%, and 17% respectively of $32 billion worth of metal extracted.[24]

The 2013 estimated exploration budget for non-energy minerals in the U.S. decreased by 38% from 2012, dropping from $1.7 billion to $1 billion. Continued uncertainty about the U.S. and European economies, as well as weakened demand from China, either depressed or maintained prices for non-energy minerals. Noteworthy exploration sites for non-energy minerals were located in Alaska, Idaho, Nevada, and Wyoming, over half of which were for gold and silver.[25]

Gold can be found in both loose materials and hard rocks. Miners extract gold from placer mines using sluicing, dredging, jigging, and amalgamation devices which separate the gold from water, silt, rocks, and other compounds. Lode mining, both open pit and underground, extracts gold embedded within rock walls. Once mined, gold is used to make jewelry, electronics, dental treatments, and other products. In 2013, the majority of U.S. gold came from Nevada (172,000 kilograms) and Alaska (30,600 kilograms).[26] In Nevada, recent exploration for gold resulted in discoveries along the Carlin and Battle Mountain-Eureka (Cortez) trends in Eureka and Elko Counties, and in the Pequop Mountains in Elko County.[27] Alaska continues to be a prominent site for gold exploration, although exploration spending in 2013 made up less than half the peak expenditure in 2011.[28] Half of the estimated 2013 total $1 billion U.S. budget for non-energy mineral exploration was for gold.[29]

Copper is found in hard rocks in the form of copper ore. Miners extract copper from open pit and underground mines through traditional quarrying to separate

[24] U.S. Geological Survey, "Mineral Commodity Summaries 2014," pg. 7, http://minerals.usgs.gov/minerals/pubs/mcs/2014/mcs2014.pdf
[25] U.S. Geological Survey, Wilburn, D.R. and K.A. Stanley, "Exploration Review," 2013, pg. 27, 37 – 39, http://minerals.usgs.gov/minerals/mflow/exploration-2013.pdf
[26] U.S. Geological Survey, "Monthly Industry Survey: Gold in November and December 2013," pg. 2, http://minerals.usgs.gov/minerals/pubs/commodity/gold/mis-201311_12-gold.pdf
[27] Nevada Bureau of Mines and Geology, The Nevada Mineral Industry Special Publication MI-2011," 2013, pg. 8, http://pubs.nbmg.unr.edu/The-NV-mineral-industry-2011-p/mi2011.htm
[28] U.S. Geological Survey, Wilburn, D.R. and K.A. Stanley and N.A. Karl, "Exploration Review," 2014, pg. 35 – 36, http://minerals.er.usgs.gov/minerals/mflow/exploration-2014.pdf
[29] U.S. Geological Survey, Wilburn, D.R. and K.A. Stanley, "Exploration Review," 2013, pg. 37, http://minerals.usgs.gov/minerals/mflow/exploration-2013.pdf

the copper from rock, or leaching which involves treating the ore with dilute sulphuric acid. Once produced, copper has a variety of uses, including as building material, as an effective conductor of electricity, and within the health sector. In 2013, Arizona accounted for the most copper production out of U.S. states with 795,000 metric tons.[30] In terms of exploration, an estimated 36% of the 2013 total $1 billion U.S. budget for non-energy mineral exploration was for base metals, primarily copper.[31]

Iron is found in underground rocks. Miners drill holes in the ground in carefully engineered patterns and blast out rocks with explosives. Next, miners crush the rocks and separate out the iron ore from other materials. Almost all iron is used to make steel, which, in turn, is used to make buildings, infrastructure, machines, and vehicles. In 2013, 99% of the iron ore shipped in the U.S. came from Minnesota and Michigan.[32] Exploration continues on the Mesabi Iron Range in Minnesota; in 2013, companies drilled nearly 200 exploratory holes for iron along the Mesabi Range.[33]

To learn more about where natural resources are produced on federal lands in the U.S., visit: http://eiti-dev.18f.gov/

[30] U.S. Geological Survey, "Mineral Industry Surveys: Copper in January of 2014," pg.3, http://minerals.usgs.gov/minerals/pubs/commodity/copper/mis-201401-coppe.pdf
[31] U.S. Geological Survey, Wilburn, D.R. and K.A. Stanley, "Exploration Review" 2013, pg. 37, http://minerals.usgs.gov/minerals/mflow/exploration-2013.pdf
[32] U.S. Geological Survey, "Mineral Commodity Summaries: Iron Ore," pg. 84, http://minerals.usgs.gov/minerals/pubs/commodity/iron_ore/mcs-2014-feore.pdf
[33] Minnesota Department of Natural Resources, "Exploration Drilling Map for Metallic Minerals by Company in 2013," http://files.dnr.state.mn.us/lands_minerals/mineral_faq/mn_expdrilling_map_2013.pdf

U.S. NATURAL RESOURCE EXTRACTION FEDERAL GOVERNANCE

Who owns land, ocean waters, and natural resources in the U.S.?

Land and Ocean Waters Ownership

Natural resource ownership in the U.S. is closely tied to land and ocean waters ownership. There are four main land owners in the U.S.: (1) private citizens and corporations, (2) the federal government, (3) state and local governments, and (4) Indian tribes and individuals. There are two owners for the waters surrounding the U.S.: states and the federal government.

The following provides a brief description of types of lands and waters held by different owners in the U.S.:

1. Private lands: Lands owned by private citizens or corporations

2. Federal lands and waters[34]: Lands and waters owned by the federal government, including:

   - *Public domain lands* ceded to the U.S. by treaty, purchase, or conquest
   - *Acquired lands* purchased by, given to, exchanged with, or transferred through condemnation proceedings to the federal government
   - *Military acquired lands* purchased by the federal government under military acquisition laws
   - *Outer Continental Shelf* (OCS) waters located farther than three miles off a state's coastline, or three marine leagues into the Gulf of Mexico off of Texas and western Florida[35]

3. State lands and waters, and local lands: Lands and waters owned by state or local governments, including:

   - *State lands* owned by a particular state
   - *State waters* stretching from a state's coast to three miles out into the ocean[36]

[34] Congressional Research Service, Gorte, Ross W., Carrol Hardy Vincent, Laura A Hanson, Mark R. Rosenblum, "Federal Land Ownership: Overview and Data," 8 Feb 2012, http://fas.org/sgp/crs/misc/R42346.pdf
[35] Lands beneath navigable waters belong to states, and are defined as extending three geographical miles from the coastline into the Arctic Ocean, the Atlantic Ocean, the Pacific Ocean, and the Gulf of Mexico, and as extending from the coastline three marine leagues into the Gulf of Mexico off Texas and western Florida.
[36] For additional information, see the Submerged Lands Act here.

- *Local lands* owned by a local government, such as a county

4. Indian lands: Lands owned by Indians, including:

   - *Tribal lands* held in trust by the federal government for a tribe's use
   - *Indian allotments* held in trust by the federal government for individual Indians' use
   - *Alaska Native Corporation lands* in Alaska, held by 12 regional Alaska Native Corporations that received rights to some surface lands as well as rights to natural resources below the surface; in addition to these 12, certain village-level Alaska Native Corporations hold additional surface land rights[37]

Natural Resource Ownership

In the U.S., private individuals or corporations, as well as federal, state, local, or tribal governments, can own both land and the oil, gas, coal and other minerals found below the surface. In fact, widespread private ownership of oil, gas, coal and minerals makes the U.S. different from nearly every other country, in which these resources simply belong to the national government.

Natural resource ownership in the U.S. has many historical roots in the 19th century, when the federal government passed homestead and development acts to encourage settlement in the Western U.S. These acts, along with the General Mining Law of 1872, allowed for both federal public domain lands and the natural resources within them to pass to private ownership. Starting in the 20th century, the U.S. passed legislation that began to withdraw both specific natural resources and eventually public domain lands from settlement and other development, preserving these lands and natural resources in federal ownership today.

Sometimes in the U.S., the land's surface owner is different than the owner of the minerals in ground below. The party that owns the land's surface has surface rights, while the party that owns the natural resources in the ground has subsurface rights. When ownership is divided in this way, it is referred to as a split estate.[38] There are 57 million acres of land in the U.S. where the federal government owns oil, gas, coal, and other minerals below the surface, but another party, mostly citizens or corporations, owns the surface land above.[39] Land and mineral ownership can become quite complicated in the U.S. Often, a

[37] U.S. Government Accountability Office, "Regional Alaska Native Corporations: Status 40 Years After Establishment and Future Considerations," Dec 2012, pg. 5 – 6, http://www.gao.gov/assets/660/650857.pdf
[38] Bureau of Land Management, "Split Estate," http://www.blm.gov/wo/st/en/prog/energy/oil_and_gas/best_management_practices/split_estate.html
[39] Bureau of Land Management, "Leasing of Onshore Federal Oil and Gas Resources," http://www.blm.gov/wo/st/en/prog/energy/oil_and_gas/leasing_of_onshore.html

combination of private landholders, the federal government, a state government, or Indian tribes own the span of a single mine or field.

When it comes to the waters and natural resources found off the U.S. coast, the federal government and state governments split ownership. In general, states have primary authority and natural resource ownership in the three-mile area extending outward from their coasts. The federal government owns oil, gas, and minerals located under federal waters on the OCS, which extend from the states' offshore boundaries out to at least 200 nautical miles from the shore.

What are the federal laws, regulations, and reforms governing natural resource extraction in the U.S.?

Federal Laws and Regulations

The legislative branch of the federal government has passed many laws related to natural resource extraction on federal lands and waters in the U.S. The following table lists the laws that provide the backbone of the fiscal regime for the extractive industries, as well as the relevant lands and natural resources to which they apply.

Select Laws Establishing the Fiscal Regime for Extractive Industries in the U.S.

Law Name and Code	Description	Relevant Lands or Waters	Relevant Natural Resources
The General Mining Law of 1872 As Amended (30 USC § 29 and 43 CFR 3860)	Provides the right to patent, meaning transfer to private ownership federal land and natural resources for mining. Since October 1, 1994, Congress has imposed a budget moratorium on any new mineral patent applications.	Federal Onshore (public domain)	Locatable hard rock minerals (e.g., gold, silver, and copper)
Leasing of Allotted Lands for Mining Purposes Act of 1909 (25 USC § 396 and 25 CFR 212)	States that all lands allotted to Indians, except those made to members of the Five Civilized Tribes and Osage, may be leased for mining purposes for any term of years as may be deemed advisable by the Secretary of the Interior.	Indian (allotted)	Not specified
Mineral Leasing Act of 1920 As Amended (30 USC 181 et seq.)	Creates a system of leasing mineral resources on federal lands for extraction, and grants the Bureau of Land Management (BLM) authority to administer mineral leasing.	Federal Onshore (public domain)	Coal, oil, gas, oil or gas shale, sodium, potassium, phosphate, sulfur, and gilsonite

In addition to federal laws, extractive industries companies must comply with state and local laws. To learn more about these laws, visit a list of state websites with links to legal information on the online report here [insert link].

Law Name and Code	Description	Relevant Lands or Waters	Relevant Natural Resources
Indian Mineral Leasing Act of 1938 (25 USC § 396a et seq.)	Opens un-allotted lands within any Indian reservation for leasing for mining purposes by authority of the tribal council and approval from the Secretary of the Interior.	Indian (tribal)	Not specified
Mineral Leasing Act for Acquired Lands of 1947 (30 USC § 351 et seq. and 43 CFR 3420)	Extends Mineral Leasing Act of 1920 and authority of the Secretary of the Interior to govern mineral leasing on federal acquired lands.	Federal onshore (acquired)	Coal, oil, gas, oil or gas shale, sodium, potassium, phosphate, sulfur, and gilsonite
Mineral Materials Act of 1947 (30 USC § 601 et seq.)	Regulates the sale and permitting of the most common hardrock minerals, in place of the General Mining Law of 1872. Also known as the Common Varieties Act.	Federal onshore	Common hardrock minerals (e.g., sand, gravel, stone, pumice, cinders, etc.)
Submerged Lands Act of 1953 (43 USC § 1301 et seq.)	Recognizes the states' rights to the submerged navigable lands within their boundaries as well as the marine waters within their boundaries, often defined as three geographical miles from the coastline.	State offshore	All natural resources
Outer Continental Shelf Lands Act of 1953 As Amended (43 USC § 1331)	Gives the Secretary of the Interior responsibility for administering mineral exploration and development and other energy resources on the Outer Continental Shelf, subject to environmental safeguards. Mandates receipt of fair market value for mineral leasing.	Outer Continental Shelf	Oil, gas, and other minerals
Geothermal Steam Act of 1970 (30 USC § 1001, et seq.)	Allows the leasing of federal land under BLM's administration for geothermal resource development, excluding prohibited lands.	Federal onshore	Geothermal
Mining and Minerals Policy Act of 1970 (30 USC § 21a)	Amends the Mining Act of 1920. Establishes the national interest to develop a domestic private enterprise mining industry while addressing adverse environmental impacts.	Federal onshore	All natural resources
Federal Coal Leasing Amendments Act (FCLAA) of 1976 (90 STAT 1083)	Amends Section 2 of the Mineral Leasing Act of 1920. Requires all public lands available for coal leasing to be leased competitively, the government to only accept lease bids equal to or greater than fair market value, the consolidation of leasing into logical mining units, lease holders to continually operate, and other measures.	Federal onshore	Coal

Law Name and Code	Description	Relevant Lands or Waters	Relevant Natural Resources
Surface Mining Control and Reclamation Act (SMCRA) of 1977 (30 USC § 1201 et seq.)	Establishes the Office of Surface Mining, Reclamation, and Enforcement to oversee state coal mining regulatory programs and address environmental impacts of coal mining; requires coal mine owners to contribute bonds to rehabilitate the land after mining operations; and establishes the Abandoned Mine Reclamation Fund.	Federal onshore	Coal
Federal Oil and Gas Royalty Management Act (FOGRMA) of 1982 (30 USC § 1701 et seq.)	Grants the Secretary of the Interior authority for managing and collecting oil and gas royalties from leases on federal and Indian lands.	Federal onshore, Indian, and Outer Continental Shelf	Oil and gas
Indian Mineral Development Act of 1982 (25 USC §§2101-2108)	Provides Indian tribes with flexibility in the development and sale of mineral resources, including opportunities to enter into joint venture agreements with mineral developers.	Indian (tribal)	Oil and gas, coal, geothermal, and other mineral resources
Federal Onshore Oil and Gas Leasing Reform Act (FOOGLRA) of 1987 (30 USC § 181 et seq.)	Amendment to the Mineral Leasing Act of 1920. Gives the Forest Service the authority to proactively offer leases for oil and gas on National Forest System lands provided environmental and other land use regulations are met. BLM largely administers leasing on these lands.	Federal onshore	Oil and gas
Federal Oil and Gas Royalty Simplification and Fairness Act (RSFA) of 1996 (30 USC § 1701 et seq.)	Improves royalty management from federal and Outer Continental Shelf oil and gas leases.	Federal onshore and Outer Continental Shelf	Oil and gas
Energy Policy Act (EPAct) of 2005 (42 USC § 13201 et seq.)	Addresses energy production in the U.S., including the production, transportation, or transmission of energy on the Outer Continental Shelf waters from sources other than oil and gas (e.g., wind energy); incentives for oil and gas development; and provisions to access oil and gas resources on federal lands.	Federal onshore and Outer Continental Shelf	Oil, gas, coal, wind, solar, hydropower, and geothermal
Gulf of Mexico Energy Security Act (GOMESA) of 2006 (120 Stat. 2922)	Opens 8.3 million acres in the Gulf of Mexico for oil and gas leasing, shares leasing revenues with gulf producing states and the Land & Water Conservation Fund, and bans oil and	Outer Continental Shelf	Oil and gas

Law Name and Code	Description	Relevant Lands or Waters	Relevant Natural Resources
	gas leasing within 125 miles off the Florida coastline in the Eastern Planning Area and a portion of the Central Planning Area until 2022.		

The following table lists additional laws that govern the operations of extractive industries companies. Some of these laws require companies to pay fees. Violating some of these laws can also result in companies paying fines.

Select Laws Resulting in Fines or Fees for Extractive Industries Companies in the U.S.

Law Name and Code	Description	Relevant Lands	Relevant Natural Resources
Federal Land Policy and Management Act (FLPMA) of 1976 (43 USC §1701 et seq.)	Requires BLM to administer federal lands using a land use planning framework that includes no unnecessary or undue degradation, multiple-use, sustained yield, considerations for present and future generations, and public planning. Requires receipt of fair market value for use of federal lands and resources.	Federal onshore and Indian	All natural resources
Clean Air Act (CAA) of 1970 (42 USC §7401 et seq.)	Outlines steps that federal agencies, state and local governments, and industry must take to decrease air pollution. Oil and gas wells are exempt from legal aggregation, whereby the emissions from small sites that are connected, in close proximity, or under shared ownership are added together and regulated as "stationary sources" if they emit or could emit 100 tons per year of a pollutant.	All lands	All natural resources, except when oil and gas are exempted
Clean Water Act (CWA) of 1972 (33 USC §1251 et seq.)	Establishes regulatory framework to protect water quality and monitor discharges of pollutants into waters in the U.S. The U.S. Environmental Protection Agency does not require National Pollutant Discharge Elimination System (NPDES) permits for uncontaminated storm water discharges from oil and gas exploration, production, processing or treatment operations, transmission, or drill site preparation.[40]	All lands	All natural resources, except when oil and gas are exempted

[40] U.S. Environmental Protection Agency, "Regulation of Oil and Gas Construction Activities," 9 March 2009, http://water.epa.gov/polwaste/npdes/stormwater/Regulation-of-Oil-and-Gas-Construction-Activities.cfm

Law Name and Code	Description	Relevant Lands	Relevant Natural Resources
Safe Drinking Water Act (SDWA) of 1974 (42 USC 300f-300j)	Protects public health by regulating the nation's public drinking water supply and its sources. As of the 2005 Energy Policy Act, hydraulic fracturing fluids are exempt from underground injection control permits unless diesel fuel is used in the extraction process.[41]	All lands	All natural resources, except when oil and gas are exempted
Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 (42 USC 9601–9675)	Provides a federal "Superfund" to clean up uncontrolled or abandoned hazardous-waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment, and gives the U.S. Environmental Protection Agency the power to seek out those parties responsible for any release and assure their cooperation in the cleanup.	All lands	All natural resources, except when oil and gas are exempted
Endangered Species Act (ESA) of 1973 (16 USC § 1531 et seq.)	Protects and recovers imperiled species and the ecosystems upon which they depend.	All lands	All natural resources
Marine Mammal Protection Act of 1972 (16 USC 1361 et seq.)	Prohibits, with certain exceptions, the "take" of marine mammals in U.S. waters and by U.S. citizens on the high seas, and the importation of marine mammals and marine mammal products into the U.S.	All lands	All natural resources, except when oil and gas are exempted

There are many other laws with which extractive industries companies must comply. DOI, the U.S. Environmental Protection Agency (EPA), the National Oceanic and Atmospheric Administration (NOAA), and other federal agencies' websites contain more comprehensive lists of related laws that they enforce:

- *DOI BOEM:* http://www.boem.gov/Regulations/BOEM-Governing-Statutes.aspx
- *DOI BSEE:* http://www.bsee.gov/Regulations-and-Guidance/BSEE-Governing-Statutes/
- *DOI BLM:* http://www.blm.gov/wo/st/en/info/regulations.html
- *EPA:* http://www2.epa.gov/laws-regulations/laws-and-executive-orders#majorlaws
- *NOAA:* http://www.nmfs.noaa.gov/ole/about/what_we_do/laws.html

In addition, the online report contains a curated search of relevant laws available here [add link].

[41] U.S. Environmental Protection Agency, "Regulation of Hydraulic Fracturing Under the Safe Drinking Water Act," http://water.epa.gov/type/groundwater/uic/class2/hydraulicfracturing/wells_hydroreg.cfm

Federal agencies, such as DOI and relevant bureaus, implement these laws by developing and enforcing regulations and rules. The following section lists key regulations related to natural resource extraction in the U.S., particularly on federal and Indian lands:

- Title 25 in the Code of Federal Regulations relates to sovereign Indian nations. Sub-chapter I deals with Energy and Minerals (Parts 200 – 227).
- Title 30 governs mineral resources. Chapter II deals with the Bureau of Safety and Environmental Enforcement; Chapter V deals with the Bureau of Ocean Energy Management; Chapter VII deals with the Office of Surface Mining Reclamation and Enforcement; Chapter XII deals with the Office of Natural Resources Revenue.
- Title 43 in the Code of Federal Regulations governs public lands. Sub-chapter C focuses on Minerals Management (Parts 3000 – 3870).

Implementing laws includes complying with the National Environmental Policy Act (NEPA) of 1969 (42 USC § 4321 et seq.). NEPA is intended to ensure that decision makers and the public have information about the potential impacts to the environment of proposed federal actions and alternatives to those actions. When taking any major action, such as leasing natural resources on federal lands for extraction, federal agencies must prepare Environmental Assessments (EAs) and/or Environmental Impact Statements (EISs) to document environmental impacts of agency actions and alternatives to those actions. The public has legally mandated opportunities to comment on the impact statements.

In 2010, the U.S. enacted the Dodd-Frank Act (124 Stat. 1376) that requires extractive industries companies that have issued securities for public purchase to separately disclose information about payments to governments around the world, including their U.S. corporate tax payments. The Securities and Exchange Commission (SEC) is rewriting the rule to implement this law. The SEC has stated that the revised rule will be proposed in the spring of 2016. Once finalized, publicly-traded U.S. companies will report according to the law and the rule.

Federal Government Reforms

The federal government reforms laws and regulations by enacting new legislation and proposing new rules. Reforms can stem from government oversight organizations' recommendations, including from both DOI's Inspector General and the Government Accountability Office. Below are lists of reforms following the Deep Water Horizon oil spill, recent findings from government oversight organizations, and proposed rules.

Regulatory Reforms Following the Deepwater Horizon Oil Spill

Reforms to federal regulations occurred in the aftermath of the Deep Water Horizon Oil Spill in the Gulf of Mexico in 2010.[42] The federal government changed which bureaus and offices within DOI leased, regulated, and collected revenue for oil and gas extraction on the Outer Continental Shelf. DOI formed new bureaus focused on offshore leasing (the Bureau of Ocean Energy Management) [43] and offshore regulation (the Bureau of Safety and Environmental Enforcement), as well as a new office focused on revenue collection and management (the Office of Natural Resources Revenue). When Secretary Salazar announced the creation of ONRR in May 2010 and the elimination of the former Minerals Management Service later in June, his goal was to fundamentally restructure the government's mineral leasing, regulatory, and revenue collection agencies. He wanted to:

- separate the three responsibilities;
- provide each office and bureau with the independence and resources necessary to fulfill their missions; and
- eliminate real and perceived conflicts associated with the previous organization.

While the federal government did make regulatory reforms following the spill, Congress did not change any laws related to offshore fossil fuel management in response to the accident.

Office of the Inspector General Reports

The DOI's Inspector General (OIG) is responsible for the independent oversight and promotion of excellence, integrity, and accountability within the programs, operations, and management of DOI. The OIG also identifies and prevents fraud, waste, and mismanagement within the agency. In recent years, the OIG has published numerous reports related to federal revenues from natural resource extraction, including:

- October 2014, "BIA Needs Sweeping Changes to Manage the Osage Nation's Energy Resources." The report states that the Bureau of Indian Affairs Osage Agency has a flawed oil and gas management program, including the policies and procedures that guide royalty payment activities, accounting, and leasing activities. The report provides 33 recommendations to improve the program.
- March 2014, "Final Audit Report – Bureau of Land Management's (BLM) Mineral Materials Program." The audit report states that, among other challenges, the BLM Mineral Materials Program has little

[42] Visit the Report to the President, "Deep Water: The Gulf Oil Disaster and the Future of Offshore Drilling," following the Deep Water Horizon oil spill here: http://www.gpo.gov/fdsys/pkg/GPO-OILCOMMISSION/pdf/GPO-OILCOMMISSION.pdf

[43] Bureau of Ocean Energy Management, "Reforms Since the Deep Water Horizon Tragedy," http://www.boem.gov/Reforms-since-the-Deepwater-Horizon-Tragedy/

assurance that it obtains market value for mineral materials and provides 15 recommendations to enhance the program.

- September 2012, "Oil and Gas Leasing in Indian County: An Opportunity for Economic Development." This report concludes that Indian oil and gas leasing is not reaching its full economic potential, largely due to a lack of a dedicated and coordinated management focus at the federal level for the more than 17,000 leases on Indian lands.
- May 2010, "Minerals Management Service: Royalty-In-Kind (RIK) Program's Oil Volume Verification Process." The OIG found several areas where the RIK Program could improve to ensure proper accounting of royalties that are paid in oil and gas volumes to the U.S. government, rather than in dollars.
- March 1999, "Opportunity to Increase Offshore Oil and Gas Rental Revenues, Minerals Management Service." This report highlights opportunities for the Minerals Management Service to increase revenues for certain leases subject to the Deep Water Royalty Relief Act of 1995.

Government Accountability Office Reports

The Government Accountability Office (GAO) is an independent, non-partisan agency that investigates how the federal government spends taxpayer funds, including those for natural resource management on federal and Indian lands and waters. The GAO publishes its reports on the GAO Summary Page. Some recent GAO findings related to natural resource extraction include:

- December 2013, "Actions Needed for Interior to Better Ensure a Fair Return." This report examines steps DOI has taken to ensure that the public receives a fair return on oil and gas resources extracted from federal lands and waters, and recommends improvements to the fiscal system.
- September 2008, "Oil and Gas Revenues: The Federal System for Collecting Oil and Gas Revenues Needs Comprehensive Reassessment." This report evaluates the government take from federal oil and gas resources and assesses the DOI's work in monitoring the performance and appropriateness of the current fiscal system.
- March 1989, "The Mining Law of 1872 Needs Revision." This report critiques the foundational mining law on three major points: that the law's annual work requirements need to be replaced, that the law forces the federal government to sell valuable land at nominal prices, and that the patent provision runs counter to other natural resource policies.

Proposed Rules

Recently, BLM has proposed new rules that go into effect in 2015, including:

- BLM rule on hydraulic fracturing available in the Federal Register publication of Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands
- Proposed BLM rule on wind and solar competitive leasing available in the Federal Register
- Proposed ONRR rule on consolidated federal oil and gas and federal and Indian coal valuation reform available in the Federal Register

What roles do federal government agencies play in natural resource fiscal management in the U.S.?

In the U.S., Congress passes laws to govern the extraction of natural resources and the fiscal management of resulting revenues. Federal agencies, part of the executive branch, then develop regulations and rules to implement and enforce those laws.

U.S. Department of the Interior (DOI)

DOI protects and manages the nation's natural resources and cultural heritage; provides scientific and other information about those resources; and honors its trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated island communities.

Bureaus and offices within the DOI fulfill this mission by serving three primary functions related to natural resource extraction: (1) managing federal and Indian lands, waters, and natural resources; (2) enforcing regulations and rules; and (3) collecting, managing, and disbursing revenues from natural resource extraction on federal and Indian lands and waters.

The following DOI organizations play an important role in natural resource extraction for onshore lands, including federal and Indian lands:

Bureau of Land Management's (BLM) mission is to manage and conserve federal lands for the use and enjoyment of present and future generations under a mandate of multiple-use and sustained yield. BLM manages the exploration, development, and production of natural resources on federal lands, including lease sales and the permitting and licensing processes. BLM also ensures that developers and operators comply with requirements and regulations. BLM collects revenues in the form of fees.

Office of Surface Mining, Reclamation, and Enforcement's (OSMRE) mission is to protect society and the environment from the adverse effects of surface coal mining operations, while balancing the

nation's need for continued domestic coal production with protecting the environment. OSMRE oversees state programs that enforce mining laws and arrange for cleanup of abandoned mine lands. OSMRE collects revenues in the form of reclamation fees from companies to pay for the cleanup of abandoned mine lands under the Abandoned Mine Land Reclamation (AML) Program.

The following DOI bureaus play a major role in natural resource extraction on the Outer Continental Shelf:

Bureau of Ocean Energy Management's (BOEM) mission is to promote energy independence, environmental protection, and economic development through responsible, science-based management of offshore conventional and renewable energy and marine mineral resources. BOEM manages the responsible exploration and development (including resource evaluation, planning, and leasing) of federal offshore energy and mineral resources in compliance with environmental laws, such as the National Environmental Policy Act.[44] In FY 2013, BOEM collected $2 million in revenues in the form of cost recovery fees.

Bureau of Safety and Environmental Enforcement's (BSEE) mission is to promote safety, protect the environment, and conserve resources offshore through vigorous regulatory oversight and enforcement. BSEE enforces safety and environmental regulations, and updates rules governing leasing and operations on the Outer Continental Shelf. In FY 2013, BSEE collected $70 million in revenues in the form of fees.

The following DOI office plays an important revenue management role in natural resource extraction for both onshore federal and Indian lands and offshore on the Outer Continental Shelf:

Office of Natural Resources Revenue's (ONRR) mission is to collect, disburse, and verify federal and Indian energy and other natural resource revenues on behalf of all Americans. ONRR collects revenues from energy and mineral leases for both onshore and offshore federal and Indian lands and waters, manages and disburses revenues to funds and recipients, and advocates for the interests of Indian mineral owners. In FY 2013, ONRR collected $14.4 billion in revenues in the form of bonuses, rents, and royalties.

[44] Bureau of Ocean Energy Management, "BOEM and the National Environmental Policy Act," http://www.boem.gov/National-Environmental-Policy-Act/

HOW NATURAL RESOURCES RESULT IN FEDERAL REVENUES

How does government award rights to extract natural resources from federal lands and waters?

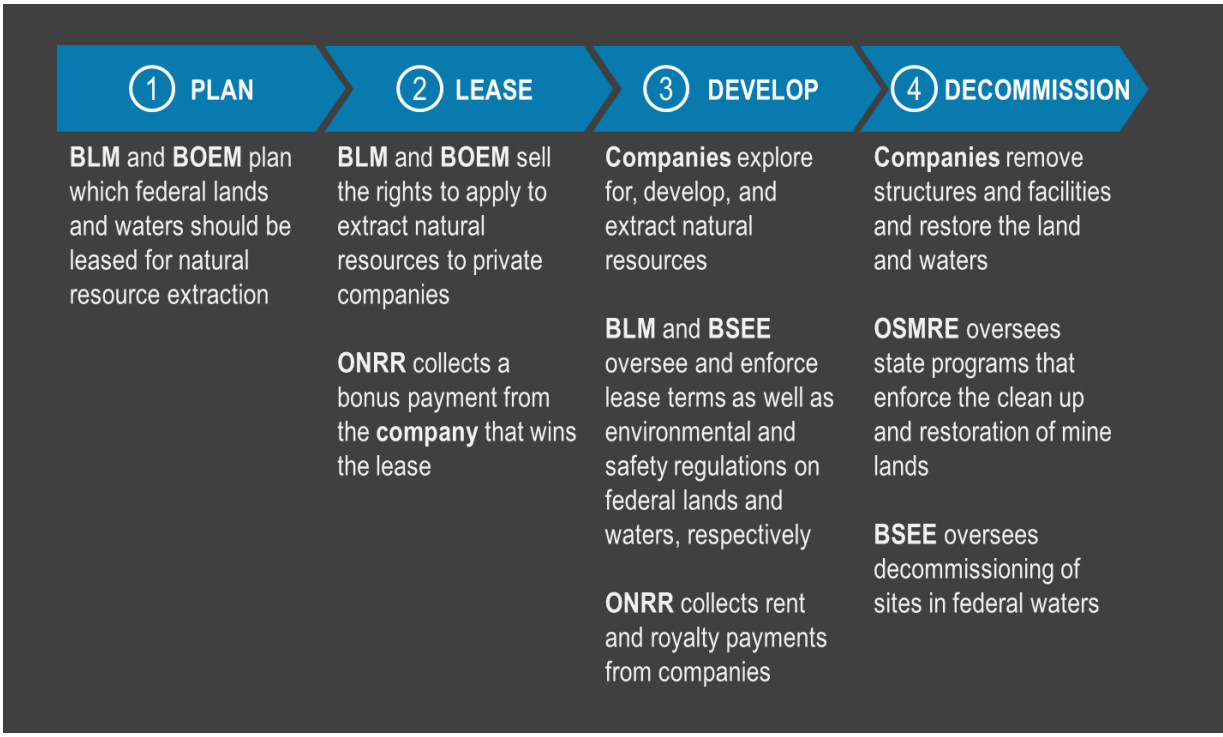
In the U.S., citizens, corporations, and public bodies such as municipalities, can apply to the federal government for rights to extract natural resources from federal lands and waters. The 2015 USEITI Report focuses on companies, the largest revenue contributors. Unlike many other countries with significant extractive industries, the U.S. federal government does not own, wholly or in part, oil, gas, renewable energy, or mining companies.

In awarding rights to companies to extract natural resources from federal lands and waters, the government balances competing policy goals and interests, and adheres to and enforces regulations. For the right to extract many natural resources from federal lands and waters—which are owned by U.S. citizens—companies pay the federal government revenues.

There are four main phases for how the U.S. awards rights to extract natural resources from federal lands and waters, and how extracting those resources eventually results in revenues for the public. The following image includes a description of these phases for fossil fuels.[45]

[45] For more information, visit: http://www.blm.gov/wo/st/en/prog/energy/oil_and_gas.html, http://www.blm.gov/wo/st/en/prog/energy/oil_and_gas/questions_and_answers.html, http://www.blm.gov/wo/st/en/prog/energy/coal_and_non-energy.html, http://www.boem.gov/Leasing/

How Fossil Fuel Natural Resources on Federal Lands and Waters Result in Revenues



1. Plan

In addition to engaging with environmental and regulatory reviews, the public can participate and inform how natural resources result in federal revenues by engaging locally with BLM, BOEM, and intergovernmental natural resource task forces. For example, BOEM regularly holds community meetings and public hearings with citizens in Alaska.

During the plan phase, the BLM and BOEM make long-term land-use plans to identify which federal lands and waters they should open to natural resource extraction. BLM and BOEM operate within the laws set by Congress, which specify land uses.

In making land-use plans, BLM and BOEM balance the U.S.' energy and economic needs with environmental and other considerations. BLM's Multi-use Planning Process for coal extraction and BOEM's Five Year Outer Continental Shelf Oil and Gas Leasing Program are examples of how the government weighs different public interests in land-use planning.

At this stage, the federal government must often prepare a Programmatic Environmental Impact Statement in line with the National Environmental Policy Act to estimate the results of the natural resource extraction program on the environment under different scenarios. The public has many opportunities to engage with and comment during this process.

2. Lease

During the lease phase, the government, specifically BLM for onshore lands and BOEM for offshore lands, sells the rights to apply to explore for, develop, and extract natural resources on a parcel of federal land or waters. This sale of rights is called a lease. Leases don't last forever; for example, a lease could last for ten or forty years, during which time the lease holder must demonstrate progress in extracting natural resources. When leases expire, the rights return to the federal government.

The laws and statutes that govern natural resource extraction in the U.S. have created safeguards in the leasing process to protect the public's interest. For example, all oil and gas leases, both onshore and offshore, as well as almost all coal leases, go through a competitive leasing process. A competitive process is open to interested bidders, and multiple parties can bid on and compete for a single lease. The government awards the lease to the highest bidder, so long as they meet requirements (for example, the bidder for a federal coal lease cannot hold an existing federal coal lease for over ten years that hasn't produced commercial quantities of coal). Leasing for fossil fuels becomes non-competitive only when one party bids on an oil and gas lease, or when a parcel of land for coal leasing is surrounded by a company's existing mining operation.

As an additional safeguard to get the public a fair price, the government cannot accept any bid (even if there is only one bid) for an oil, gas, or coal lease if it does not meet or exceed the fair market value. The fair market value is the fair price that the government's analysis shows an applicant would bid given the geological resources on the land parcel. For offshore waters, BOEM conducts the fair market value analysis after opening each sealed bid to make sure the apparent winner's bid is high enough. BOEM looks for evidence of market competition and estimates the tract value. For onshore lands, BLM estimates the fair market value prior to a lease sale. Different state offices use different approaches, including using recent comparable sales and estimating the future value of the natural resources in question. After BLM has determined fair market value, BLM conducts live auctions for leases.

In both the competitive and non-competitive leasing process, BLM for onshore resources and ONRR for offshore resources collect the bid, called a bonus payment, as well as the first year's rent for the lease from the winning company.

At this stage, the federal government must often prepare a site-specific Environmental Assessment or Environmental Impact Statement in line with the National Environmental Policy Act to estimate the effect of natural resource extraction on the environment of the site in question. The public has many opportunities to engage with and comment on this process.

A report from DOI's OIG found that in 80% of coal lease sales in the Powder River Basin, only one company submitted a bid during 1994 – 2013. Since there was little competition for extracting coal during this time period, calculating fair market value was extremely important to ensuring the public received a fair price. BLM assesses fair market value based on the price of coal, current and future demand, shipping and transportation costs, the quality of the coal, and other factors. The OIG's report made 13 recommendations to improve the leasing process, including using the department's Office of Valuation Services to calculate fair market value, and adjusting the calculation to reflect growing demand from China for U.S. coal.

The process of how the federal government awards rights to extract natural resources from federal lands and waters, and how those resources eventually result in revenues, differs depending on the resource in question and whether extraction is taking place on or off shore. To learn more about how different resources become revenues, visit the online report: http://eiti-dev.18f.gov/resource_revenues

Oil & Gas [insert link]

Coal [insert link]

Non-energy Minerals [insert link]

Renewables [insert link]

3. Develop

During the develop phase, once the government has awarded a lease, the lease holder still needs licenses and permits from federal, state and local, and potentially tribal agencies to explore for, develop, and extract leased resources. The most common type of permit for onshore resources is a permit to drill, which gives lease holders permission to drill for oil and gas. The federal government issues other grants during the extraction process, including rights of way and rights of easement. These grants allow companies to build support structures for extraction operations on federal lands and waters.

For many natural resources, once a company wins a lease and starts exploring, developing, and extracting, ONRR collects revenue from the extraction process. Before production starts, companies pay annual rent, set in the lease, to ONRR. Once production starts in paying quantities, companies pay royalties on the value of the resource extracted. During this phase, BLM and BSEE conduct inspections and take additional measures to enforce lease terms, as well as operations on federal lands and waters, respectively.

4. Decommission

During the decommission phase, the lease holder must remove all facilities and structures following the terms of the lease, as well as take steps to return the land or waters to an environmentally and economically sound state. The government often holds a bond, paid upfront by the private company, as insurance that the lease holder will comply with all regulations and appropriately decommission the project.

In the case of coal, OSMRE oversees state programs to enforce restoring mine lands following the end of a mining operation. BLM also ensures shut-in and abandoned oil and gas production sites are reclaimed properly.

While most natural resources on federal lands and waters where extraction generates revenues travel through these four phases, the details of the process differ by resource, and whether extraction happens onshore or offshore.

Where can the public learn more about specific leases to extract natural resources from federal lands and waters?

Depending on the resource, public information about who has applied for exploration and development rights—and received them under what terms—varies by the federal bureau responsible for managing it. For example, BOEM maintains a public database of offshore leases that includes PDF copies of some

leases. BLM manages leasing through state and regional field offices; copies of leases for onshore resources are only available in BLM field offices.

The EITI requires that participating countries maintain a register of licenses for natural resource extraction that meets certain criteria. The following provides an overview of publicly-available information regarding different types of licenses (in particular leases), links to public information, and a checklist of EITI criteria met:

Natural Resource Rights	Source	Adherence to EITI criteria for Standard 3.9 Register of Licenses
Leases for **offshore** natural resources, including oil and gas and other minerals, as well as renewable energy resources (information on plans, permits, and right of ways also available)	The public can view information related to leases (and sometimes the leases themselves), issued for resources on the Outer Continental Shelf by visiting BOEM's lease information page and BSEE's database	☑ Lease holder ☑ Coordinates of lease area ☑ Date of application ☑ Date of award ☑ Duration ☑ Commodity produced
Register of leases and rights of way for **onshore** natural resources including oil and gas, coal, solar, wind, and geothermal (information on permits, contracts, grants, and agreements also available); information on unpatented mining claims included	The public can see whether a lease was issued for oil and gas, if lands were nominated for a geothermal sale, total applicants for a wind energy development project, or number of solar right of way actions processed or granted by visiting BLM's LR2000 database	☑ Lease/right of way/project holder or applicant ☑ Coordinates of lease area (state only for oil and gas, township for geothermal) ☑ Date of application (for some commodities) ☑ Date of award ☑ Duration (for some commodities) ☑ Commodity produced

In the case of offshore natural resources, the public can also learn the process for leasing in individual sales, the technical and financial criteria used, and the bidders involved. BOEM's Regional Leasing pages for Alaska, the Gulf of Mexico, and the Pacific contain this information, as well as BOEM's renewable energy leasing page.

What revenues do companies pay for extracting natural resources?

Learn more about the national revenue classification system in the U.S. here. Learn more about the International Monetary Fund's international revenue standards here and Code of Good Practices on Fiscal Transparency here.

Revenue Types and Rates

In general, to extract natural resources leased on federal lands or on the Outer Continental Shelf, lease holders pay bonuses, rents, royalties, and penalties (if incurred) to ONRR, and in some cases BLM. Royalties, a percentage of the sales value of extracted resources, make up most of the revenues paid to the

federal government. Lease holders also pay different fees to BLM, BSEE, and BOEM, often to reimburse the government for costs associated with awarding, administering, and enforcing leases.

Corporations operating in the extractive industries also pay taxes to the IRS on their income. These companies pay corporate income taxes regardless of whether extracting natural resources from federal, state, or privately-held lands, inside or outside of the U.S., so long as they have a liability. These companies also pay taxes on income stemming from extracting natural resources, and from processing them into other products and commodities. There are different types of companies operating in these industries, with different ownership structures and as a result, different taxpayers. Specifically, there are:

- *C-corporations* with many shareholders who own the company; the company pays corporate income taxes to the IRS
- *S-corporations* with 100 shareholders or less who own the company; shareholders pay personal income taxes to the IRS
- *Partnerships* where two or more people manage and own the business; partners pay personal income taxes to the IRS
- *Sole proprietorships* with one, individual owner; the individual owner pays personal income tax to the IRS

Only income taxes from C-corporations are included in the 2015 reconciliation and USEITI Report.

The graphic on the next page summarizes the revenue types and rates paid by companies that extract fossil fuels from federal lands. To learn the revenue types and rates for other natural resources throughout the extraction process, please visit the online report.

Revenue Policy Provisions

While royalty rates can go as high as 18.75% and the federal corporate income tax rate can reach 35% depending on company income, companies often pay less than these rates. Revenue policy provisions, including royalty relief and tax expenditures, result in smaller revenue and tax payments to the federal government in order to promote other policy goals.

MAJOR FEDERAL REVENUE TYPES FOR FOSSIL FUELS

A company wins a lease and pays a **bonus** and first year's rent to ONRR, or in some cases, BLM

A company pays annual **rent** to ONRR during the lease period until resources are produced

*Rent set in lease: ranges **$1.50** – **$44.00** per acre*

A company starts producing a resource and pays **royalties**, a percentage of the sales value, to ONRR

Royalty rates set in the lease:
- ***12.5%** Onshore Oil & Gas*
- ***12.5%**, **16.67%**, or **18.75%** Offshore Oil & Gas*
- ***12.5%** Surface Mined Coal*
- ***8%** Subsurface Mined Coal*

Throughout the resource extraction process, companies pay BOEM, BSEE, and BLM fees, including **cost recovery fees** to reimburse the government for costs incurred in issuing, administering, and enforcing a lease

Coal mining companies pay **reclamation fees** on coal produced to OSMRE
- ***28 cents** per ton Surface Mined Coal*
- ***12 cents** per ton Subsurface Mined Coal*

C-corporations pay quarterly **income taxes** against their tax liability to the IRS

Royalty Relief

In order to incentivize companies to produce additional oil and gas on certain leases on the Outer Continental Shelf where extraction would likely be unprofitable, the federal government grants some lease holders royalty relief. Royalty relief means that these lease holders do not have to pay royalties, or pay a smaller percentage of royalties, for the oil and gas they extract. There are four situations in which a lease holder may gain royalty relief:

- Leases in deep waters over 200 meters in the Gulf of Mexico
- Leases in shallow waters under 200 meters with deep gas production
- Leases towards the end of their life where halving royalties would encourage additional production
- Special cases where existing programs do not increase production

In some situations, if oil and gas prices rise above certain thresholds, lease holders that previously gained royalty relief must start paying royalties at the regular rate once again.

While not technically a part of a royalty relief program, miners that lease and extract many non-energy minerals from federal lands, such as gold, copper, and iron, often called locatable hardrock minerals, do not pay royalties to the federal government. These resources still fall under the General Mining Law of 1872, which doesn't include any royalty provisions.

Tax Expenditures

"Tax expenditures are defined in the law as 'revenue losses attributable to provisions of the federal tax laws which allow a special exclusion, exemption, or deduction from gross income or which provide a special credit, a preferential rate of tax, or a deferral of tax liability.' These exceptions may be viewed as alternatives to other policy instruments, such as spending or regulatory programs."[46]

The U.S. Department of the Treasury (Treasury) estimates the total dollar amount of each tax expenditure in a given year, and publishes a report of these estimates.[47]

Treasury provides estimates for five expenditures related to extracting fossil fuels. For 2013, expensing of exploration and development costs for fuels was

[46] The U.S. Department of the Treasury, FY16 "Tax Expenditures," http://www.treasury.gov/resource-center/tax-policy/Documents/Tax-Expenditures-FY2016.pdf

[47] Tax expenditure estimates do not necessarily equal the increase in federal revenues (or the change in the budget balance) that would result from repealing these special provisions.

the largest expenditure out of these five, totaling $550 million.[48] The Budget of the U.S. Government also includes annual estimates of the net revenue effects of eliminating a wider range of fossil fuel related tax expenditures outlined in the Treasury's report "United States – Progress Report on Fossil Fuel Subsidies." When added together, eliminating these fossil fuel tax expenditures would decrease the deficit by $4.4 billion a year on average over the 10-year budget widow as of the FY16 Mid-Session Review estimates.[49]

Treasury provides estimates for four tax expenditures targeted to developing renewable energy. For 2013, the energy investment credit was the largest out of those four, totaling $2 billion. The energy production credit was the second largest, totaling $1.7 billion. [50]

Instead of receiving the energy production or energy investment credits, companies can claim a payment, so long as they placed their renewable energy facilities in service from 2009 – 2011, or if construction began for these facilities during this period and the property was put in service by a set deadline. According to the Treasury, the effect of these payments on federal budget outlays in 2013 was $8 billion.

Treasury provides estimates for two tax expenditures related to extracting non-energy minerals. For 2013, excess of percentage over cost depletion for non-energy minerals was the largest out of those two, totaling $580 million.[51]

Visit the online report [insert link] to learn more about tax expenditures relevant to the extractive industries, including the definitions and 2013 total dollar estimates.

Where do the federal revenues go?

Once collected, revenues from natural resource extraction on federal lands and waters are distributed for public use in a variety of ways. The recipient of these funds depends on certain key variables:

1. *Location:* whether the revenues are derived from onshore or offshore resource extraction
2. *Type:* which natural resource the revenues are derived from

[48] From table 14-1 "Estimates of Total Income Expenditures for Fiscal Years 2013 – 2019," total for corporations and individuals. The U.S. Department of the Treasury, FY15 "Tax Expenditures," http://www.treasury.gov/resource-center/tax-policy/Documents/Tax-Expenditures-FY2015.pdf
[49] The White House, "Fiscal Year 2016 Mid-Session Review, Budget of the U.S. Government," Table S 8 Mandatory and Receipt Proposals, pg. 56, https://www.whitehouse.gov/sites/default/files/omb/budget/fy2016/assets/16msr.pdf
[50] From table 14-1 "Estimates of Total Income Expenditures for Fiscal Years 2013 – 2019," total for corporations and individuals. The U.S. Department of the Treasury, FY15 "Tax Expenditures," http://www.treasury.gov/resource-center/tax-policy/Documents/Tax-Expenditures-FY2015.pdf
[51] Ibid.

Federal Onshore Revenue Distribution

In FY 2013, the federal government disbursed $5.141 billion in royalties, rents, bonuses, and other payments from onshore resource extraction operations. These revenues were disbursed across recipient entities as follows:

FY 2013 ONRR Disbursements from Onshore Natural Resource Extraction on Federal and Indian Lands[52]

Recipient Entity	Description	Disbursement Amount
U.S. Treasury	Funds disbursed to the U.S. Treasury go to the U.S. General Fund, which is the government's basic operating fund. The U.S. General Fund pays for roughly two-thirds of all federal expenditures, including the U.S. military, parks, and schools.	$470 million (9% of federal onshore disbursements)
The Reclamation Fund	Established by Congress in 1902 to pay for Bureau of Reclamation projects, this fund supports the establishment of critical infrastructure projects like dams and power plants.	$1.592 billion (31% of federal onshore disbursements)
States	Funds disbursed to states fall under the jurisdiction of each state to determine how they will be used.	$1.964 billion (38% of federal onshore disbursements)
American Indian Tribes	The Department of Interior disburses 100% of revenues collected from resource extraction on Indian land back to the tribes and individual Indian landowners.	$933 million (18% of federal onshore disbursements)
Other	Certain onshore funds are directed back to the federal agencies that administer these lands (BLM, U.S. Fish & Wildlife Service, and U.S. Forest Service) to help cover operational costs. The Ultra-Deepwater Research Program and the Mescal Settlement Agreement also receive $50 million each.	$182 million (4% of federal onshore disbursements)

[52] Office of Natural Resources Revenues, disbursement data, http://statistics.onrr.gov/ReportTool.aspx

Federal Offshore Revenue Distribution

Federal revenues from natural resources such as oil, gas, wind energy, and marine minerals (e.g., gravel and sand) extracted from the Outer Continental Shelf (OCS) totaled $9.046 billion in FY 2013. These revenues were disbursed across recipient entities as follows:

FY 2013 ONRR Disbursements from Offshore Natural Resource Extraction on the Outer Continental Shelf[53]

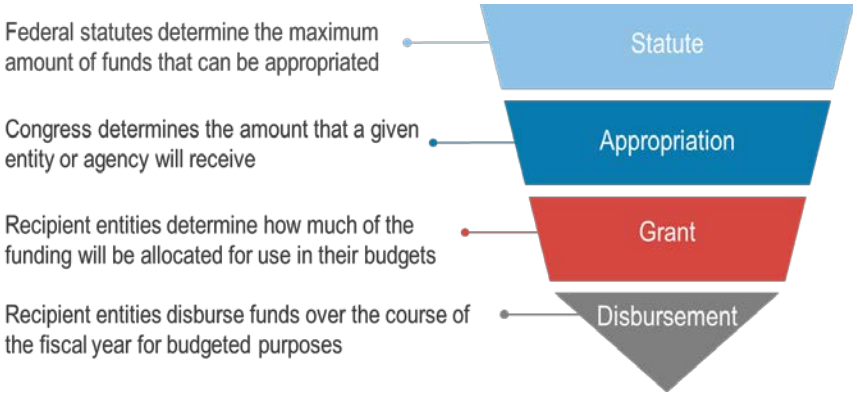
Recipient Entity	Description	Disbursement Amount
U.S. Treasury	The majority of offshore revenues are disbursed to the U.S. Treasury, which enter the U.S. General Fund, the government's basic operating fund. The U.S. General Fund pays for roughly two-thirds of all federal expenditures, including the U.S. military, parks, and schools.	$7.781 billion (86% of federal offshore disbursements)
Land & Water Conservation Fund	This fund provides matching grants to states and local governments to buy and develop public outdoor recreation areas across the 50 states.	$896 million (10% of federal offshore disbursements)
Historic Preservation Fund	This fund helps preserve U.S. historical and archaeological sites and cultural heritage through grants to state and tribal historic preservation offices.	$150 million (2% of federal offshore disbursements)
States	States receive federal OCS revenues in two ways: ▪ 27% of revenues from leases in the 8(g) zone (the first three nautical miles of the OCS) are shared with states ▪ 37.5% of revenues from certain leases in the Gulf of Mexico are shared with Alabama, Louisiana, Mississippi, and Texas	$41 million (<1% of federal offshore disbursements)
Other	Certain offshore funds are directed back to the federal agencies that administer these lands (BOEM and BSEE) to help cover operational costs.	$215 million (2% of federal offshore disbursements)

Federal Budget Process

Once extractive industries' revenues are collected by the government, they are funneled through a series of budgetary "gateways" before reaching a point where

[53] Office of Natural Resources Revenues, disbursement data, http://statistics.onrr.gov/ReportTool.aspx

they can ultimately be invested locally in community development and public services sustainment. Those gateways are described below:



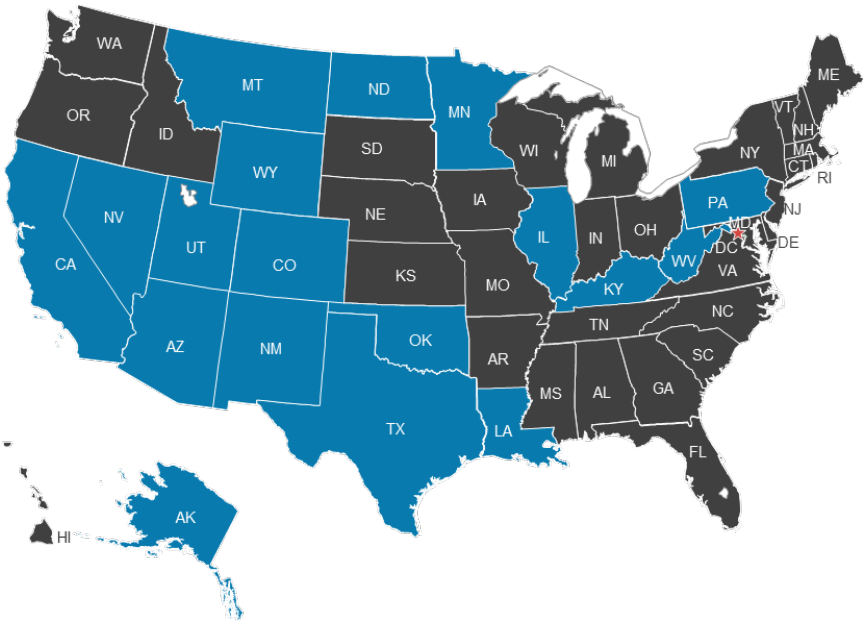
STATE & TRIBAL NATURAL RESOURCE EXTRACTION GOVERNANCE

How is natural resource extraction governed in states?

Under the U.S. federal structure, states maintain ownership of some lands and natural resources; develop their own taxation and royalty systems applicable to oil, gas, mining, and renewable energy; and collect extractive revenues directly. Each state has a unique revenue system.

While all 50 states have some natural resource extraction activity, the 2015 USEITI Report focuses on the 18 that collected $50 million or more in severance taxes in 2013, highlighted in blue in the following map:

Map of 18 States that Collected $50 M or more in Severance Taxes in 2013[54]



In accordance with adapted implementation, the USEITI has organized online state government data sources [insert link] regarding each of these 18 states' laws and statutes, revenues collected and dispersed, state government agencies, and state production data relevant to natural resource extraction.

Role of State and Local Governments

State government agencies create regulations and rules related to natural resource extraction based on applicable state laws and statutes (federal laws and regulations apply to all states and localities). Specifically, state government agencies (1) manage state-owned land and natural resources, including leasing natural resources for extraction; (2) enforce regulations and rules related to natural resource extraction; and (3) collect, manage, and disburse revenues from natural resource extraction.

Each state has unique agencies that fulfill these functions. For example:

- *Manage state-owned land and natural resources:* the Louisiana Department of Natural Resources oversees natural resource extraction on state-owned lands. In Arizona, the Arizona State Land Department fulfills this function. Both agencies administer natural resource leasing programs that transfer rights to resources on state-owned lands to companies for extraction.

[54] U.S. Census Bureau, O Sullivan, Shelia and Russell Pustejovsky, Edwin Pome, Angela Wongus, and Jesse Willhide, "State Government Tax Collections Summary Report: 2013," 8 April 2014, http://www2.census.gov/govs/statetax/2013stcreport.pdf

- *Enforce regulations and rules:* states with surface mining operations have agencies devoted to restoring surface mine lands, such as the West Virginia Department of Environmental Protection's Office of Abandoned Mine Lands and Reclamation. DOI's OSMRE oversees this office, as well as others like it in other states.
- *Collect, manage, and disburse revenues:* in many states, the state department of revenue collects, manages, and disburses revenues collected from natural resource extraction on state and private lands within the state, as well as transfer payments from the federal government for natural resource extraction on federal lands located within the state. For example, the Montana Department of Revenue collects and distributes revenues, including those related to extractive industries, for the state of Montana.

Local government agencies also play a role in natural resource extraction in their jurisdictions. In particular, county departments of revenue collect, manage, and disburse local revenues from extractive industries activities.

State Leasing Programs

State ownership of land constitutes almost 9% of total land area in the U.S.[55] Each state has their own process for leasing natural resources on state-owned lands and in state-owned waters, as well as different oversight procedures for when companies develop natural resources and decommission projects. For example, in the State of Alaska, the Director of the Division of Oil and Gas at the Department of Natural Resources must establish in writing that the state's interests will be optimized before any leasing action can occur.

State Extractive Industries Revenues

The revenues a state receives from extractive activities varies by the local legal and fiscal framework, as well as the types of resources and land owners involved. At a high level, many states receive the following revenues:

- *Bonuses*, *rents*, and *royalties* for natural resources produced from state-owned lands
- *Severance taxes*, sometimes called gross production taxes or royalties, on the value of natural resources produced in a state whether on federal, state, or privately owned lands
- *Transfer payments* from the federal government for natural resource production on federal lands within a state's borders or off its coast

[55] Natural Resources Council of Maine, "Public Land Ownership by State," http://www.nrcm.org/documents/publiclandownership.pdf

For example, the state of Wyoming applies the following severance taxes on the value of extracted resources before processing and transportation:

Wyoming Severance Tax Rates[56]

Natural Resource	Severance Tax Rate
Natural Gas	6%
Oil	6%
Surface Coal	7%
Underground Coal	3.75%
Gold	2%
Shale	2%

State Revenue Disbursements

Each individual state determines how to disburse revenues from extractive industries' activities. To illustrate, North Dakota, one of the leading oil and gas producing states in the country, levies an oil and gas production tax at 5% of the gross production value. Twenty percent of the money collected from this tax is distributed to various state funds, while 80% flows to counties, cities, schools, and townships.

Moreover, North Dakota also sets an oil extraction tax at 6.5%[57] of the gross production value, which is distributed as follows:

- 20% to the Common Schools Trust Fund and Foundation Aid Stabilization Fund to support public institutions of learning and offset foundation aid reductions, respectively
- 20% to the Sinking Fund and Resources Trust Fund, which allocates resources for energy conservation programs
- 30% to the Legacy Fund, which provides a perpetual source of state revenue from the finite oil and natural gas resources
- 30% to the General Fund, which is the primary cash account for the state to cover administrative and operating expenses

In comparison, Alaska, another leading oil and gas producer, levies its own oil and gas production tax at 35% of the net value. Most of the revenue derived from the oil and gas production tax is deposited in the state's General Fund for government operations and basic services. Payments resulting from an

[56] State of Wyoming Department of Revenue, "Severance Tax Rates," http://revenue.wyo.gov/mineral-tax-division/severance-tax-filing-information
[57] North Dakota Tax Department, "Oil and Gas Frequently Asked Questions," http://www.nd.gov/tax/misc/faq/oilgas/

assessment or litigation are deposited into the Constitutional Budget Reserve Fund (CBRF), which covers the state's short-term deficits.[58]

Many states chose to establish permanent mineral trust funds through legislation. These funds allow states to invest and hold revenues from natural resource extraction over time. Permanent mineral trust funds can help governments dependent on revenues from natural resources smooth revenues and investments across boom and bust cycles.

Select States with Permanent Natural Resource Trust Funds[59]

State	Natural Resource(s)	Fund	Revenue Design	Revenue Uses
AL	Oil and gas	Alabama Trust Fund	99% of all oil and gas capital payments paid to the state	General Fund, Forever Wild Land Trust Fund
AK	Primarily oil	Alaska Permanent Fund	25% of mineral related (oil) income and legislative appropriations	Citizen dividends, inflation proofing, and General Fund
MT	Coal	Coal Severance Tax Trust Fund	25% of mineral related (oil) income and legislative appropriations	Citizen dividends, inflation proofing, and General Fund
NM	Oil, gas, and coal	Severance Tax Permanent Fund	50% of coal severance tax collections	General Fund, education, infrastructure, remediation, and economic development
ND	Oil	Legacy Fund	30% of oil production tax revenues	General Fund
UT	Coal, oil, and gas	State Endowment Fund	Severance tax revenues in excess of $71 million from oil and gas tax; revenues in excess	Economic diversification, capital, and infrastructure

[58] Alaska Department of Revenue, Tax Division, "Annual Report 2014," http://www.tax.alaska.gov/programs/documentviewer/viewer.aspx?1139r

[59] For additional information on the State Permanent Natural Resource Trust Funds listed here, please visit: AL: http://www.treasury.state.al.us/content/About%20the%20ATF.html, AK: http://www.apfc.org/home/Content/home/index.cfm, MT: http://leg.mt.gov/content/Publications/fiscal/leg_reference/Brochures/2014-Coal-Severance.pdf, NM: http://www.sic.state.nm.us/severance-tax-permanent-fund.aspx, ND: http://www.ndlegacyfund.com/new-page/, UT: http://finance.utah.gov/reporting/documents/11FinalFinancialHighlightsNovemberIssue.pdf, WY: https://treasurer.state.wy.us/pdf/annualweb2013.pdf , Civil Society Organizations, such as Policy Matters Ohio and the West Virginia Center on Budget and Policy have compiled similar information for the public available here and here respectively.

State	Natural Resource(s)	Fund	Revenue Design	Revenue Uses
			of $27.6 million from coal mining	
WY	Coal, oil, and gas	Wyoming Permanent Mineral Trust Fund	1.5 – 2.5% severance tax on natural gas, oil, and coal (30 – 40% of mineral revenues)	General Fund

Impact of Extractive Industries on State Economies

The following table highlights the size of extractive industries' contribution to state economies in Value Added GDP, revenues from production on federal lands and waters within a state, wage and salary employment in extractive industries, and the value of extractive industries exports originating from that state. To explore the impact of extractive industries on all states in more depth, please visit the online report.

2013 Extractive Industries[60] Select Economic Indicators in Prioritized States

State	Value Added GDP[61] (millions)	Revenues[62] from Federal Lands (accounting year)	Annual Wage and Salary Employment[63]	Value of Exports from State of Origin[64] (millions)
AK	$16,092	$32,434,956	16,999	$340.93
AZ	$6,113	$75,899	12,616	$2087.73
CA	$26,143	$267, 149, 988	27,873	$0
CO	$15,658	$292,096,820	30,270	$111.88
IL	$3,792	$297,987	9,649	$215.27
KY	$5,081	$2,041,734	17,207	$0

[60] For data in this report using the North American Industry Classification System (NAICS), we have renamed NAICS Code 21, often abbreviated as "Mining," "Extractive Industries" to indicate to the reader that this category includes oil and gas extraction in addition to mining

[61] Bureau of Economic Analysis, Regional Data for GDP and Personal Income, https://www.bea.gov/iTable/index_regional.cfm

[62] FY 2013 accounting year total reported revenues for all federal lands (onshore and offshore); Office of Natural Resources Revenue, Statistical Information, http://statistics.onrr.gov/Default.aspx

[63] Bureau of Economic Analysis, Regional Data for GDP and Personal Income, https://www.bea.gov/iTable/index_regional.cfm

[64] Census Foreign Trade Data, state by 6-Digit HS code, codes used are related to natural resource extraction and not processing (such as petroleum): 260112, 260300, 261690, 270112, 270119, 270900, 271111, 271121; valued in 2014 dollars; note: only top 25 exports for each state are included in this dataset; https://www.census.gov/foreign-trade/statistics/state/data/index.html

State	Value Added GDP[61] (millions)	Revenues[62] from Federal Lands (accounting year)	Annual Wage and Salary Employment[63]	Value of Exports from State of Origin[64] (millions)
LA	$24,832	$196,597,252	51,143	$898.8
MN	$2,454	$74,134	6,220	$314
MT	$2,469	$79,710,276	8,825	$74.21
NV	$7,193	$16,536,037	15,314	$604.39
NM	$8,553	$1,048,496,858	25,805	$0
ND	$7,796	$247,009,628	25,916	$723.08
OK	$25,117	$13,862,648	59,043	$0
PA	$14,498	$110,555	34,982	$1999.12
TX	$212,431	$46,336,699	287,554	$3834.42
UT	$3,903	$308,021,015	12,043	$0
WV	$9,406	$553,152	30,878	$4,548.08
WY	$13,777	$2,011,081	26,459	$43.91

How is natural resource extraction governed on Indian lands?

According to the 2011 American Community Survey, there were 5.1 million American Indians and Alaska Natives living in the U.S., accounting for approximately 1.6% of the population.[65] The federal government formally recognizes 567 Indian tribes and 325 Indian reservations that cover 56 million acres of land.[66] This land is held in trust by DOI and has significant natural resource extraction potential, with up to 10% of the nation's untapped energy resources located therein.[67] Extracting natural resources on Indian land and

[65] U.S. Census Bureau, "American Indian and Alaska Native Heritage Month: November 2012," https://www.census.gov/newsroom/releases/archives/facts_for_features_special_editions/cb12-ff22.html
[66] Bureau of Land Management, "Public Land Statistics 2013," http://www.blm.gov/public_land_statistics/pls13/pls2013.pdf, Walker, Richard, *Indian Country*, "A Place to Call Home; Cowlitz Tribe Signs Land into Trust for Reservation," 12 March 2015, http://indiancountrytodaymedianetwork.com/2015/03/12/place-call-home-cowlitz-tribe-signs-land-trust-reservation-159568
[67] House of Representatives Committee on Natural Resources, http://naturalresources.house.gov/subcommittees/subcommittee/?SubcommitteeID=5066

distributing the associated revenues involves a unique set of processes and stakeholders.

The basis of the regulatory relationship between Indian tribes and the federal government regarding land use was first established in the 1830s. In a series of Supreme Court hearings known as the Marshall Trilogy, Supreme Court Justice John Marshall established several important principles of Indian law. One was the federal Indian trust responsibility, whereby the government charged itself with "moral obligations of the highest responsibility and trust" toward Indian tribes.[68] In this capacity, the U.S. government maintains fiduciary responsibility to protect tribal assets and resources, and serves as a trustee for Indian lands.[69] Another was the principle that tribes are sovereign, which is inherent to them as the original governing bodies of what is now the U.S., and which can only be diminished by Congress.[70]

Today, there are two major types of Indian owned land[71]:

- *Trust land*, in which the federal government holds legal title but the beneficial interest remains with the individual or tribe. Trust lands held on behalf of individuals are known as allotments
- *Fee land purchased by tribes*, in which the tribe acquires legal title under specific statutory authority

These lands yield natural resources through a process governed primarily by the tribes themselves and four agencies within DOI. When a tribe initiates the leasing process, the Bureau of Indian Affairs (BIA) or the tribe itself negotiates the lease sale, sets royalty rates and rental amounts, and issues the lease. If the tribe negotiates the lease, the BIA will approve the final negotiated deal. For an allotment owned by an individual, the BIA holds a bidding process to ensure the best return for the allottee. Once a contract is signed, BLM inspects the lease and helps prepare production and mining plans.

ONRR collects royalties from extractive companies and reviews\ monthly revenue and production reports to ensure accuracy. ONRR also performs lease audits to ensure royalties are correctly paid. The Office of the Special Trustee for American Indians (OST) receives the payments and information from ONRR and disburses 100% of the funds to the owner of the land, whether that is an individual or a tribe.[72]

Natural resources are increasingly a key source of income for many American Indian tribes. In FY 2013, ONRR and OST disbursed $933 million to American

[68] Bureau of Indian Affairs, "Frequently Asked Questions," http://www.bia.gov/FAQs/index.htm
[69] Ibid.
[70] Johnson v. McIntosh, 21 U.S. 543, (1823)
[71] Tribal Energy and Environmental Information Clearinghouse, http://teeic.indianaffairs.gov/triballand/
[72] Office of Natural Resources Revenue, "Frequently Asked Questions from Indian Mineral Owners," http://www.onrr.gov/IndianServices/pdfdocs/FrequentlyAskedQuestion.pdf

Indian tribes and allottees, an increase of over 171% from ten years prior.[73] The following table breaks out specific production and revenue totals for key resources in FY 2013:

The federal government may only release information about natural resource extraction and revenues in aggregate across all Indian lands. This is because of confidentiality and proprietary constraints on tribal data. These constraints arise from treaties, laws, and regulations that the government consistently and uniformly applies.

FY 2013 Indian Land Natural Resource Production & Reported Revenues (Sales Year Data)[74]

Resource	Production	Royalties	Rents	Bonuses
Coal (ton)	19,145,716	$78,225,311	$106,325	$12,561,353
Oil (bbl)	46,421,857	$729,744,651	$4,231,254	-
Natural Gas (mcf)	240,552,694	$126,043,575		-
Natural Gas Liquids (gal)	154,923,429	$15,317,988		-
Copper (ton)	3,967	$1,034,988	$6,174	-

EXTRACTIVE INDUSTRIES IMPACTS

What roles do the extractive industries play in the U.S. national economy?

Gross Domestic Product (GDP) measures the total value of goods and services produced in a specific geography. The Bureau of Economic Analysis (BEA) measures GDP by adding up the "real value added" for each industry that contributes to the U.S. economy. According to the BEA, real value added includes "compensation of employees, taxes on production and imports, less subsidies, and gross operating surplus."

In 2013, the U.S. Gross Domestic Product (GDP) was $16.8 trillion, making the U.S. economy the largest in the world. Overall the extractive industries account for 2.6% of the U.S. economy, outpacing utilities, agriculture, and education services in contribution to national GDP. The extractive industries in the U.S. total $439 billion in real value added.[75]

[73] Office of Natural Resources Revenue, Statistical Information, http://statistics.onrr.gov/ReportTool.aspx
[74] Ibid.
[75] Bureau of Economic Analysis, Industry Data, http://www.bea.gov/iTable/iTable.cfm?ReqID=51&step=1#reqid=51&step=51&isuri=1&5114=a&5102=1

2013 Extractive Industries' Real Value Added in Billions of U.S. Dollars and as a Percentage of Real U.S. GDP[76]

Industry	Real Value Added[77] (billions)	Value Added as a Percentage of Total U.S. GDP
All Industries	$16,768.1	100%
Extractive Industries[78]	$439.4	2.6%
Oil and Gas Extraction	$291.4	1.7%
Mining, Except Oil and Gas	$78.8	0.5%
Support Activities for Mining	$68.7	0.4%

Support Activities for Mining: The North American Industry Classification System (NAICS) states, "Establishments performing exploration (except geophysical surveying and mapping) for minerals, on a contract or fee basis, are included in this subsector. Exploration includes traditional prospecting methods, such as taking core samples and making geological observations at prospective sites."

Extractive industries affect the U.S. economy in a number of ways: in the quantity and value of the natural resources produced, the revenues collected for public purposes, the jobs held by people working in extractive industries, and the extractive exports that draw in money from abroad. While it can be difficult to quantify an industry's impact on a country, these measures—production, revenues, employment, and exports—start to highlight extractive industries' role in the U.S. national economy.

Production on all Lands and Waters

Production totals for select natural resources covered in the 2015 USEITI Report and their estimated financial values are listed in the table below:

2013 U.S. Production and Value for Select Natural Resources[79]

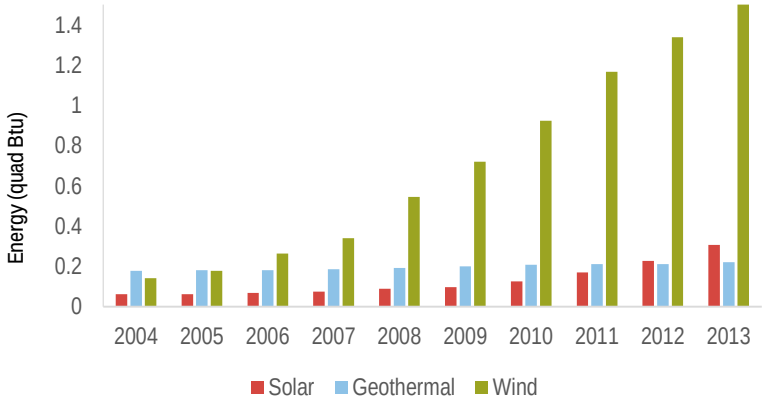
Resource	Production	Value
Oil	2,722,171 thousand barrels	~$295 billion[80]
Gas (marketed production)	25,690,878 million cubic feet	~$98.2 billion[81]
Coal	984,842 thousand short tons	~$36.7 billion

[76] Ibid.
[77] Explanation of Value Added can be found here: http://www.bea.gov/faq/index.cfm?faq_id=1034
[78] Extractive Industries as defined by U.S. Census code NAISC 21, http://www.census.gov/econ/isp/sampler.php?naicscode=21&naicslevel=2#
[79] Oil: Energy Information Administration (EIA), Crude Oil Production, http://www.eia.gov/dnav/pet/pet_crd_crpdn_adc_mbbl_a.htm; Gas: EIA, Natural Gas Marketed Production, http://www.eia.gov/dnav/ng/ng_prod_sum_dcu_NUS_a.htm; Coal: EIA, http://www.eia.gov/coal/production/quarterly/pdf/t1p01p1.pdf; Copper: U.S. Geological Survey (USGS), Mineral Commodity Summaries, http://minerals.usgs.gov/minerals/pubs/commodity/copper/mcs-2015-coppe.pdf; Gold: USGS, Mineral Commodity Summaries, http://minerals.usgs.gov/minerals/pubs/commodity/gold/mcs-2015-gold.pdf and http://minerals.usgs.gov/minerals/pubs/commodity/gold/mcs-2014-gold.pdf; Iron: USGS, Mineral Commodity Summaries, http://minerals.usgs.gov/minerals/pubs/commodity/iron_ore/mcs-2015-feore.pdf and http://minerals.usgs.gov/minerals/pubs/commodity/iron_ore/mcs-2014-feore.pdf; Value figures for Coal, Copper, Gold, and Iron Ore are from USGS Annual Commodity Summaries.
[80] Oil production value was determined by multiplying 2013 annual production by the average Europe Brent price per barrel for that same year ($108.56)
[81] Natural gas production value was determined by converting 2013 annual production from cubic feet to Btu (multiply by 1,025) and multiply by the 2013 Henry Hub natural gas spot price per million Btu ($3.73)

Resource	Production	Value
Copper	1,250 thousand metric tons	~$9.7 billion
Gold	230 metric tons	~$10.2 billion
Iron Ore	53 million metric tons	~$5 billion
Renewables[82]	534,286 gigawatt hours	Not available

In 2013, total U.S. energy production from oil, gas, mining, and renewables reached 73.67 quadrillion British thermal units (btus).[83] Over the past decade, the U.S. has invested heavily in clean energy initiatives, and renewable energy production has increased substantially. In 2013, wind power produced the largest amount of energy (1.6 quadrillion btu) compared with solar (0.3 quadrillion Btu) and geothermal (0.2 quadrillion btu) sources.[84]

Solar, Geothermal, and Wind Production, 2004 – 2013[85]



In terms on anticipating the sustainability of revenues from the extraction of natural resources on federal lands and waters, the Department of the Interior has begun annual reporting on the present value of proved reserves for oil, gas, and coal by region.

Revenues from Extractive Industries on Federal Lands and Waters

Revenues from extractive industries' activities on federal lands and waters totaled $13.5 billion in 2013, or 0.4% of total U.S. revenues collected across the federal government ($3,396.9 billion).[86] Given that private companies and citizens, as well as state, local, and tribal governments, own a significant proportion of natural resources in the U.S., this figure represents a fraction of the total revenues from natural resource extraction in 2013.

[82] Includes Hydropower, Solar, Wind, Geothermal, and Biomass, U.S. Department of Energy, "2013 Renewable Energy Databook," pg. 28, http://www.nrel.gov/docs/fy15osti/62580.pdf
[83] Energy Information Administration, "Table 1.1 Primary Energy Overview," http://www.eia.gov/totalenergy/data/monthly/pdf/sec1_3.pdf
[84] U.S. Energy Information Agency, "Short-term Energy Outlook: Renewables and CO2 Emissions," http://www.eia.gov/forecasts/steo/report/renew_co2.cfm
[85] U.S. Department of Energy, "2013 Renewable Energy Databook," pg. 28, http://www.nrel.gov/docs/fy15osti/62580.pdf
[86] In fiscal year 2013, the U.S. government received $2,775.1 billion in total receipts and $621.8 billion in offsetting collections and receipts totaling $3396.9 billion in revenues. http://www.whitehouse.gov/omb/budget/Historicals

2013 U.S. Federal Revenues from Extractive Industries for Select Natural Resources on Federal Lands and Waters (Accounting Year) [87]

Resource	Royalties	Rents	Bonuses	Other Federal Revenues
Oil	$6,893,982,830	$1,876	-	-
Gas	$1,508,090,863	-	-	-
Natural Gas Liquids	$448,137,690	-	-	-
Oil & Gas	-	$298,715,850	$2,864,635,992	$54,856,316
Coal	$697,439,021	$1,133,149	$460,458,002	$6,036,353
Copper	$1,406,249	-$2,611	-	$26,110
Gold	$363	-	-	-
Geothermal	$12,099,527	$2,612,042	$113,052	$11,152
Wind	-	$411,728	$24,108	-
Total	$9,561,156,543	$302,872,034	$3,325,231,154	$60,929,931

Income Taxes from Extractive Industries

Due to U.S. law, information about companies' individual income tax payments is confidential. However, in the U.S., there are two key sources of publicly-available information about federal income taxes for the extractive industries: the government and the filings of companies that are publicly-listed.

Publicly-Available Federal Income Tax Information from Government Sources

As mandated by the Revenue Act of 1916, the IRS publishes statistics related to "the operations of the internal revenue laws" as they affect individuals, corporations, and various other entities. The IRS Statistics of Income (SOI) Program is responsible for executing this function by collecting, processing, and presenting this data, and sharing information about how the tax system works with other government agencies and the general public.

SOI publishes data on the IRS Tax Statistics website. Information on corporate income tax liability is located under Corporation Tax Statistics, and SOI aggregates the tax data separately for S-corporations.

SOI presents the data in various ways for corporations, including by size, type of return, and sector or industry. The data by sector or industry is aggregated by the NAICS Industrial Sectors and then further by major and minor industry classifications. The total federal income tax liability reported by industry should be interpreted with care because industry classification of businesses with multiple lines of business are classified into an industry category based on the

SOI produces a sample-based annual collection of aggregate statistics from corporate income tax returns as reported by corporations filing on Form 1120 (including 1120S, 1120-L, 1120-PC, 1120-REIT, 1120-RIC, and more) and associated schedules. The tax receipts statistics compiled by SOI are based on stratified probability samples and do not reflect any changes made by the taxpayer through an amended return or by the IRS as a result of an audit. This data is a sample-based estimate that is not disaggregated by individual companies. Additional information on the SOI's sampling methodology, including its limitations, is located under the Statistical Methodology section.

[87] Office of Natural Resources Revenues, Statistical Information, http://statistics.onrr.gov/ReportTool.aspx, includes accounting year data for 2013 on federal lands and waters (does not include Indian lands)

*Statistics on corporate income tax relative to companies performing extractive activities are generally classified under the **Mining** major industry. In addition, integrated companies that operate in both the downstream extractive and refining spaces are classified under the **Petroleum and Coal Products Manufacturing** major industry.*

taxpayer's determination of the business activity from which it derives the highest percentage of its total receipts.

SOI's calculations of total U.S. federal corporate income tax receipts from all returns in the mining and petroleum refining sectors for tax years 2009 to 2013 are presented in the table below.

Calculated Federal Corporate Income Tax Receipts for Mining and Petroleum Industries 2009 – 2013

Industry (Major / Minor)	Total Receipts – All Returns ($Millions)[88]				
	2009	2010	2011	2012	2013
Mining (Major)	$ 3,831	$ 5,722	$ 5,941	$ 5,249	Pending
Oil and gas extraction	$ 1,424	$ 2,152	$ 1,811	$ 1,642	Pending
Coal mining	$ 207	$ 344	$ 325	$ 245	Pending
Metal ore mining	$ 866	$ 1,573	$ 1,945	$ 1,329	Pending
Nonmetallic mineral mining and quarrying	$ 181	$ 158	$ 183	$ 233	Pending
Support activities for mining	$ 1,153	$ 1,494	$ 1,677	$ 1,800	Pending
Petroleum and Coal Products Manufacturing (Major)	$ 1,897	$ 5,126	$ 7,630	$ 9,223	Pending
Petroleum refineries (including integrated)	$ 1,772	$ 4,865	$ 7,402	$ 9,064	Pending

Publicly-Available Federal Income Tax Information from Company Filings

Publicly listed companies are required to report tax information in a variety of ways in their annual financial statement filings, including on the Statement of Cash Flows, the Income Statement, and the Balance Sheet.[89] Depending on the geographic scope of a company's activities, it may be subject to income taxes at the federal, state, local, and/or foreign levels, which are generally reported as a single aggregate sum of the various types of tax paid during a financial reporting period.

Companies that are not publicly listed are generally not required to publish any of the tax disclosures discussed above.

In 2010, the U.S. enacted the Dodd-Frank law that requires U.S.-listed extractive companies to separately disclose information about payments to governments around the world, including their U.S. corporate tax payments. The Securities and Exchange Commission (SEC) is rewriting the rule and has stated that it will be proposed in the spring of 2016. Once finalized, publicly-traded U.S. companies will report according to the law and the rule.

[88] All figures are estimates based on samples

[89] Additional detail to support these disclosures on the financial statements can be found in the accompanying notes which are an integral part of these disclosures.

Wage and Salary Employment

According to the BEA, 808,000 people drew their wages or salaries from working in extractive industries[90] in the U.S. in 2013. Total full and part-time employment in the U.S. was 141,411,000 in 2013, meaning that roughly 0.6% of all U.S. workers were employed in the extractive industries. Within extractive industries, support activities for mining provided the largest number of wage and salary jobs.

To access employment data in the renewable energy industries, visit the Bureau of Labor Statistics (BLS) Quarterly Census of Employment and Wages. NAICS codes for these industries are:

- *Solar power generation: 221114*
- *Wind power generation: 221115*
- *Geothermal power generation: 221116*

Full-Time and Part-Time Wage and Salary Employees by Industry in 2013[91]

Industry	Employees
U.S. Total	141,411,000
Extractive Industries	808,000
Oil and Gas Extraction	197,000
Mining, Except Oil and Gas	210,000
Support Activities for Mining	401,000

In 2013, 808,000 full and part-time employees translated into 795,000 full-time equivalent (FTE) employees across extractive industries.

Full-Time Equivalent Employees by Industry in 2013[92]

Industry	FTE Employees
Domestic Industries	126,985,000
Extractive Industries	795,000
Oil and Gas Extraction	194,000
Mining, Except Oil and Gas	207,000
Support Activities for Mining	395,000

Self-Employed, Sole Proprietors, and Partnerships

In addition to the 808,000 people that drew wages and salaries from extractive industries in 2013, there are thousands of self-employed people working across the extractive industries. According to the BEA's national directorate, in 2013 there were 16,000 self-employed people working in extractive industries, defined

The BEA regional directorate determines the number of sole proprietors and partners by using IRS tax forms that individuals and partners file at the end of each year. The BEA counts the number of 1040 Schedule C forms submitted to the IRS to tally the number of sole proprietors in an industry, and performs a calculation to estimate the number of people in partnerships using 1065 forms. Some individuals are double counted, depending on how many Schedule C forms a person submits, or how likely a single person is to appear on multiple 1065 forms. Furthermore, for data collected from Schedule C forms, the BEA regional directorate does not distinguish between active proprietors that manage the business, and passive proprietors that only have investment interest in the business.

[90] Extractive industries is defined as North American Industry Classification System (NAICS) sector 21, "mining," which does not include the renewable energy industries

[91] Bureau of Economic Analysis, "6.4D Full-Time and Part-Time Employees by Industry," http://www.bea.gov/iTable/iTable.cfm?ReqID=9&step=1#reqid=9&step=3&isuri=1&903=193, and "SA27N Full-Time and Part-Time Wage and Salary Employment by NAICS Industry," http://www.bea.gov/itable/iTable.cfm?ReqID=70&step=1#reqid=70&step=1&isuri=1&7022=5&7023=0&7024=naics&7033=-1&7025=0&7026=00000&7027=2013&7001=45&7028=-1&7031=0&7040=-1&7083=levels&7029=31&7090=70

[92] U.S. Department of Commerce, Bureau of Economic Analysis, "6.5D Full-Time Equivalent Employees by Industry," http://www.bea.gov/iTable/iTable.cfm?ReqID=9&step=1#reqid=9&step=3&isuri=1&903=197

"as active proprietors and partners that devote a majority of their working hours to their unincorporated businesses."[93]

Self-Employed Persons by Industry in 2013[94]

Industry	Self-Employed Persons
U.S. Total	9,408,000
Extractive Industries	16,000

Furthermore, the BEA regional directorate calculates an additional measure of the number of self-employed people working in extractive industries. The BEA regional directorate's numbers capture sole proprietors, unincorporated partnerships, and incorporated small businesses and partnerships—a broader measure than the BEA national directorate's count. The BEA's regional directorate also uses a different methodology and different underlying data sources than the national directorate, which result in some double counting. Using the regional BEA data, the number of sole proprietors and partners receiving income from and working in extractive industries was roughly 799,000 people in 2013.

Estimate of Sole Proprietors and Partners by Industry in 2013[95]

Industry	Estimate of Sole Proprietors and Partners
U.S. Total	40,867,200
Extractive Industries	799,000
Oil and Gas Extraction	625,000
Mining, Except Oil and Gas	95,000
Support Activities for Mining	79,000

People working in the extractive industries have a range of occupations, many of which are familiar from other industries, such as bus drivers, executives, and computer and information analysts. However, some people that work in

[93] U.S. Department of Commerce, Bureau of Economic Analysis, "6.7D Self-Employed Persons by Industry," http://www.bea.gov/iTable/iTable.cfm?ReqID=9&step=1#reqid=9&step=3&isuri=1&903=205

[94] Ibid.

[95] This estimate was calculated by subtracting BEA's 2013 full-time and part-time wage and salary employment numbers from BEA's 2013 full-time and part-time employment by NAICS industry numbers. Specifically, the following sources were used: Bureau of Economic Analysis "SA25N Full-Time and Part-Time Employment by NAICS Industry," http://www.bea.gov/itable/iTable.cfm?ReqID=70&step=1#reqid=70&step=30&isuri=1&7022=4&7023=0&7024=naics&7033=-1&7025=0&7026=00000&7027=2013&7001=44&7028=-1&7031=0&7040=-1&7083=levels&7029=30&7090=70 , "SA27N Full-Time and Part-Time Wage and Salary Employment by Industry," http://www.bea.gov/itable/iTable.cfm?ReqID=70&step=1#reqid=70&step=1&isuri=1&7022=5&7023=0&7024=naics&7033=-1&7025=0&7026=00000&7027=2013&7001=45&7028=-1&7031=0&7040=-1&7083=levels&7029=31&7090=70

extractive industries have occupations unique to the industry; they are called extraction workers. In May of 2013, the estimated number one extraction worker occupation involved assembling or repairing oil field equipment using hand and power tools. The table below lists the top five extraction worker occupations, as well as the Bureau of Labor Statistics (BLS) Standard Occupational Classification (SOC) description for each.

Standard Occupation Classification (SOC) is used by the federal government to classify workers by their occupations. There are 840 detailed occupations, 13 specific to extraction workers.

May 2013 Top Five Extraction Worker Detailed Occupations[96]

Total Jobs	Detailed Occupation	SOC Description
68,230	Roustabouts, Oil and Gas	Assemble or repair oil field equipment using hand and power tools. Perform other tasks as needed.
59,260	Service Unit Operators, Oil, Gas, and Mining	Operate equipment to increase oil flow from producing wells or to remove stuck pipe, casing, tools, or other obstructions from drilling wells. May also perform similar services in mining exploration operations. Includes fishing-tool technicians.
27,130	Rotary Drill Operators, Oil and Gas	Set up or operate a variety of drills to remove underground oil and gas, or remove core samples for testing during oil and gas exploration.
23,020	Helpers, Extraction Workers	Help extraction craft workers, such as earth drillers, blasters and explosives workers, derrick operators, and mining machine operators, by performing duties requiring less skill. Duties include supplying equipment or cleaning work area.
22,400	Derrick Operators, Oil and Gas	Rig derrick equipment and operate pumps to circulate mud through drill hole.

Exports

In 2013, the U.S. exported $137,558 million in petroleum end use goods, 8.6% of all U.S. exports totaling $1,592,784 million.[97] Natural resource commodity

[96] Bureau of Labor Statistics, Occupational Employment Statistics, http://www.bls.gov/oes/2013/may/oes_stru.htm#47-0000; Standard Occupation Classifications: http://www.bls.gov/soc/2010/soc470000.htm

[97] U.S. Census U.S. Trade in International Goods and Services, "Exhibit 9. Exports, Imports, and Balance of Goods, Petroleum and Non-Petroleum End-Use Category Totals," http://www.census.gov/foreign-trade/Press-Release/2014pr/07/exh9.pdf

exports, meaning commodities that underwent minimal processing, made up approximately $22,000 million in goods produced in the U.S. sold abroad.

2013 U.S. Exports by Commodity in Millions of U.S. Dollars[98]

Natural Resource Commodity[99]	Millions
Bituminous coal, not agglomerated	$8,949
Natural Gas, Gaseous	$5,560
Crude Oil from Petroleum and Bituminous Miner	$4,108
Copper Ores and Concentrates	$2,302
Agglomerated Iron Ores	$922
Coal NESOI, not agglomerated	$172
Precious metal ores and concentrates (includes gold)	$140
Total	$22,153

2013 U.S. Exports by Commodity Volume[100]

Natural Resource Commodity	Production Units
Crude Oil	48,968 thousand barrels
Natural Gas Plant Liquids and Liquefied Refinery Gases	170,941 thousand barrels
Compressed Natural Gas and Liquefied Natural Gas	1,572,413 million cubic feet
Other Liquids (Hydrogen/Oxygenates/Renewables/Other Hydrocarbons, Unfinished Oils, Motor and Aviation Gas)	130,881 thousand barrels
Iron Ore	11 million metric tons
Copper Ores and Concentrates	390 thousand metric tons
Refined Copper	113 thousand metric tons
Gold (Refined Bullion, Dore, Ores, Concentrates, Precipitates)	691 metric tons
Metallurgical Coal	65,678,865 short tons
Steam Coal	51,899,934 short tons

How does natural resource extraction impact counties and local communities?

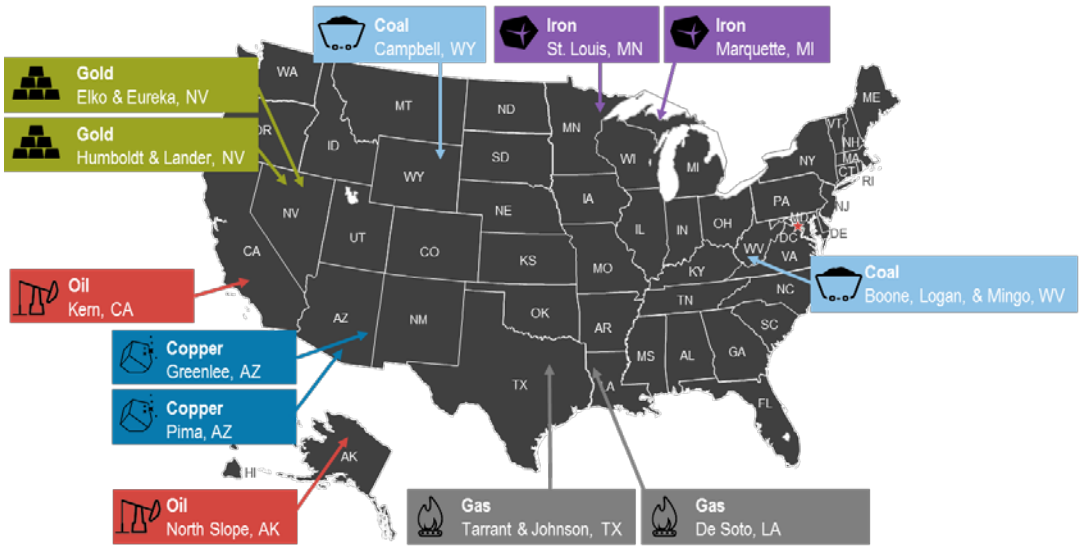
While extractive industries makes up a small but important part of the national economy in the U.S. at 2.6% of 2013 GDP, in some local communities, extractive industries play a much larger role. For example, extractive industries make up

[98] U.S. Census Bureau International Trade Data, http://www.census.gov/foreign-trade/data/
[99] Data included from harmonized system code. Codes used are related to natural resource extraction and not processing (such as petroleum.) HS-6 codes 260112, 260300, 261690, 270112, 270119, 270900, 271111, 271121. Valued in 2014 dollars.
[100] U.S. Geological Survey, http://minerals.usgs.gov/minerals/pubs/commodity/; Energy Information Administration (EIA), http://www.eia.gov/petroleum/, http://www.eia.gov/coal/; EIA, http://www.eia.gov/dnav/ng/ng_move_expc_s1_a.htm

more than a third (37%) of the State of Wyoming's GDP.[101] At the county level, certain communities and local economies may be even more dependent on extractive industries.

To improve transparency at the county level, the online report includes 12 case studies that provide a snapshot into communities that, over approximately the last decade, have led U.S. counties in production of one of the following natural resources: oil, gas, coal, gold, iron, and copper. The MSG selected these counties, or in some cases clusters of counties given geological formations, based on their recent high levels of production. The county case studies are designed to help readers understand the economic and fiscal effects of oil, gas, coal, and mineral extraction on local communities, including revenue sustainability.

12 Communities Explored through County Case Studies



Visit the online report to see the 12 case studies for each of these communities. Learn about the history and geology, production, employment, revenues, and costs for each of the extractive industries profiled in these counties.

[101] Bureau of Economic Analysis, as cited on Wyoming Department of Administration & Information Economic Analysis Division website, 2013, http://eadiv.state.wy.us/i&e/WyoGDP97_13.htm

Revenue Sustainability

Each of the 12 county narratives includes information on revenues and costs associated with extractive industries, when found in publicly-available government sources, to provide the reader with information regarding revenue sustainability at the local level. Local governments and communities often consider the numerous ways in which natural resource management and extraction can affect their fiscal health. One of the most significant considerations is the sustainability of the revenues local governments receive due to natural resource extraction. Multiple EITI guiding principles reference revenue sustainability as a critical factor in making natural resource wealth "an engine for sustainable economic growth."[102] However, when it comes to managing this critical factor, there are two challenges localities need to address:

1. The sustainability of revenues over time—given that revenues fluctuate with commodity prices and fossil fuels and hardrock mineral deposits are finite or not economically extractable based on current technology
2. The net sustainability of revenues given the fiscal benefits from increased revenues from extractive activities, and the fiscal costs from increased government expenditures necessary to support extractive activities

These revenue sustainability considerations are magnified at a local level in the U.S.: a significant influx or loss of natural resource revenues can have a material impact on the quality and variety of services that a local government can provide its citizens, both positive and negative. Therefore, in order to achieve sustainable economic prosperity, local governments must consider how they can best use natural resource revenues to promote long-term growth and investment in their communities, and how to ensure that the financial benefits of extraction outweigh the costs in the short and long-term.

County Revenues

For an example of an estimation of both the benefits and costs of extraction at the state and county level, see Economic Assessment Report for the Supplemental Generic Environmental Impact Statement on New York State's Oil, Gas, and Solution Mining Regulatory Program.

At the county level, revenues received from extractive activities take many forms. For example, some payments originate from taxes on land ownership, while others are based on ownership of the natural resource itself. There are also different methods of valuation, ranging from payments at the point-of-sale, to annual taxes, to those based on an estimated value. For the purposes of this report, the four most common categories include: property taxes, sales and use taxes, state transfer payments, and additional production taxes.

– Property taxes / ad valorem: Taxes paid by private owners of oil and gas or mineral property to the county government based on the value of the property

[102] EITI International Secretariat, The EITI Standard, 2015, https://eiti.org/files/English_EITI_STANDARD.pdf

- Sales and use taxes: Though not a direct result of natural resource extraction, revenues from sales and use taxes can rise dramatically during resource extraction booms when population and economic activity increase
- State transfer payments: Revenues transferred to the county by the state that come from sources such as:
  - Severance taxes paid by extractives industries to the state based on the volume and/or value of the resources extracted
  - Lease payments, such as bonuses, rents, and royalties, paid by the extractive industries to a public land and mineral owner, either the federal government or the state
- County production taxes: Severance taxes or other payments paid by extractive industries to the county based on the volume or value of resources extracted, or per lease terms if the county is the landowner

County Costs

More often than not, local governments must also make financial investments in their communities to support the extractive industries. These can vary based on the size of the community, the state of its current infrastructure, and the type of natural resources extracted (e.g., coal mining vs. natural gas drilling). In some circumstances, these costs are outweighed by the influx of revenues, while in other cases costs can result in net negative fiscal effects on local governments.[103] Given these possibilities and considerations, the MSG prioritized four types of fiscal costs at the local level for this year's report: transportation, water, site reclamation, and emergency services, defined in the following manner:

- Transportation: The cost of constructing new transportation infrastructure (e.g., roads or trains) or repairing current infrastructure due to heavy industry use
- Water: The cost of constructing new water or sewer infrastructure (e.g., water pipelines, treatment plants, etc.) to meet the needs of the extractive industries, upgrading current infrastructure, or treating additional wastewater from extractive activities in the public wastewater treatment system
- Reclamation: The cost of returning mines or oil and gas lands to their state prior to disturbance, including physical site stability and ecosystem functions, and long-term site monitoring
- Emergency Services: The cost of new emergency services (e.g., firehouses, ambulances, chemical spill equipment, etc.) needed to support extractive industries and protect the public from possible health and safety hazards

In terms of calculating transportation costs, in its 2008 Road & Bridge Department Impact Fee Support Study, the county of Rio Blanco, Colorado established its methodology for a road improvement fee to account for an increase in commercial trucks on its roadways.

The 1977 Surface Mining Control and Reclamation Act (SMCRA) established a process by which fees from current mining operators are used to reclaim abandoned and legacy coal mining sites. This helps offset public spending when there is no party under legal obligation to reclaim the site, or when an active industry operator is unable to fulfill its obligations due to fiscal insolvency (e.g., bankruptcy). To cover the cost of reclamation following current mine operations, SMCRA requires companies to post bonds in amounts that cover the cost of reclaiming the site at the start of the project. The government returns the bond to the company only once the site is established as successfully reclaimed.

[103] Raimi, D. and R.G.Newell, Duke University Energy Initiative, "Shale Public Finance: Local government revenues and costs associated with oil and gas development," 2014, http://dukespace.lib.duke.edu/dspace/handle/10161/9216

There are additional fiscal benefits and burdens associated with extractive activities than those addressed in this report. For example, a local government may receive in-kind revenues from the extractive industries, such as payment for a new public road that company employees will also use to access work sites. Another fiscal cost may be the additional government staff needed to manage growing public services required to support extractive activities. While all are worthy of careful consideration by local communities and governments, this year's report begins this discussion by focusing on the revenues and costs as defined above.

Methodology

To learn more about the interactions between local communities, governments, and extractive industries, consider reviewing:

- NGO websites and publications
- Industry reports and public tax filings
- Energy think tank memos
- Industry association reports
- University publications
- Environmental Impact Statements

In the U.S., members of the public can also request government data that is not online or otherwise accessible through a Freedom of Information Act (FOIA) request.

This report uses a range of publicly-available online information to compile the county case studies, including government databases, documents, and reports, as well as those produced by councils of governments. In this manner, these case studies integrate data and analysis already reported elsewhere by government bodies. Local data sources were prioritized, and data was collected and presented at the most granular level available. For example, state information took the place of county information when the latter was not available.

County and state budget documents and state agency websites were the primary data sources. Federal agency websites and reports also provided critical information on employment in extractive industries, proved reserves of various natural resources, and production estimates. Any non-governmental sources used were approved by the MSG.

This year's data collection process was the first step in bringing this information to the public in a clear, digestible way. The MSG conducted outreach with each county profiled in the report to communicate the purpose and status of the USEITI implementation, verify content, and lay the foundation for further collaboration in subsequent years.

REVENUE PAYMENT DATA RECONCILIATION

What is the scope of the data reconciliation?

EITI Standard Requirement 4.1 (a): "…In establishing materiality definitions and thresholds, the multi-stakeholder group should consider the size the of revenue streams relative to total revenues..."

Requirement 4 of the EITI Standard outlines the responsibility of the MSG to determine the scope of the EITI reporting in the U.S. In carrying out its responsibility for determining the scope of EITI reporting, the MSG considered

information from a variety of sources before coming to a consensus on the scope for the 2015 USEITI Report.

The MSG publishes meeting minutes and materials for all subcommittee and full MSG meetings on the MSG website. These minutes and materials document the MSG's historical considerations and decisions around scoping. Please refer to *Appendix A: Reconciliation Considerations* within the *Reconciliation Appendix* for additional background on the scoping process for the USEITI.

In-Scope Revenue Streams and Government Entities

EITI Standard Requirement 4.2 (a): "...All government entities receiving material revenues are required to comprehensively disclose these revenues in accordance with the agreed scope."

During the scoping process, the MSG identified the different revenue streams received by government agencies from extractive sector companies. The MSG then decided which revenue streams to include in-scope for the reconciliation in the 2015 USEITI Report. The MSG considered many factors in evaluating revenue streams, including the magnitude of the revenues and the relative complexity of gathering and reporting the data from companies. The table below lists government entities and revenue streams selected by the MSG as in-scope for reconciliation. Please also refer to *Appendix B: In-Scope Revenue Streams* within the *Reconciliation Appendix* for additional descriptions of these revenue streams.

In-Scope Government Entities and Revenue Streams

Government Entity	In-Scope Revenue Streams
Department of Interior — Office of Natural Resources Revenue (ONRR)	– Bonuses – Rents – Royalties – Other Revenues – Offshore Inspection Fees – Civil Penalties
Department of Interior — Bureau of Land Management (BLM)	– Bonus & First Year Rentals – Permit Fees – Renewable Energy Collections
Department of Interior — Office of Surface Mining Reclamation and Enforcement (OSMRE)	– Abandoned Mine Lands (AML) Fees Including Audits and Late Charges – Civil Penalties Including Late Charges
IRS Internal Revenue Service (IRS)	– Corporate Federal Income Tax Payments

In-Scope Reporting Entities

The MSG identified that ONRR collects a majority of DOI's extractive-related revenues. The MSG decided to use ONRR's reported revenues as a proxy for

DOI revenues to establish the materiality threshold for reporting. The MSG decided on a materiality threshold for the 2015 USEITI report of $50 million total annual revenues reported to ONRR by a parent company, including its subsidiaries, which was presented and approved as part of the USEITI candidacy application. The MSG agreed on this threshold because it would allow at least 80% of ONRR's revenues to be in-scope for the reconciliation. Based on revenue information provided by ONRR, the MSG materiality threshold allows for approximately 84% of ONRR revenues to be in-scope for the reconciliation.

Based on the materiality threshold defined by the MSG for reconciliation in the 2015 USEITI report, the MSG identified 45[104] companies for inclusion in the reconciliation, listed below.

In-Scope Companies

Alpha Natural Resources, Inc.
Anadarko Petroleum Corporation
ANKOR Energy LLC
Apache Corporation
Arch Coal, Inc.
Arena Energy, LLC
BHP Billiton LTD
BOPCO, LP
BP America
Chevron U.S.A. Inc.
Cimarex Energy Co.
Cloud Peak Energy Resources, LLC
Cobalt International Energy, Inc.
Concho Resources, Inc.
ConocoPhillips
Continental Resources, Inc.
Devon Energy Corporation
Encana Corporation
Energy XXI
EPL Oil & Gas, Inc.
ENI Petroleum
EOG Resources, Inc.
ExxonMobil Corporation
Fieldwood Energy LLC
Freeport-McMoRan Inc.
Hess Corporation
Linn Energy, LLC
LLOG Exploration Company LLC
Marathon Oil Company
Newfield Exploration Company
Noble Energy, Inc.
Oxy USA, Inc.
Peabody Energy Corporation
QEP Resources, Inc.
Repsol E&P USA Inc.
SandRidge Energy, Inc.
Shell E&P Company
Statoil Gulf of Mexico
Stone Energy Corporation
Talos Energy LLC
Ultra Resources Inc.
Venari Offshore LLC
W&T Offshore, Inc.
Walter Oil & Gas Corporation
WPX Energy, Inc.

[104] The Independent Administrator (IA) noted that the MSG's original scoping only identified 44 reporting companies meeting the threshold of $50M in payments to ONRR.
In June 2015 it was determined that some revenues attributed to Fieldwood Energy LLC should have been attributed to Apache Corporation. After this correction, Apache Corporation's revenues met the $50M threshold and they were added to the list of in-scope companies.
In June 2015 it was determined that the ONRR revenues for Continental Resources had been overstated during the scoping process. The adjustment removed $26,000,510 in revenues that are BLM Bonus and First Year Rentals and reduced Continental Resources' total ONRR revenues to $25,878,571, which is under the reconciliation scoping threshold. Based on this adjustment, Continental Resources should not have been identified as an in-scope company. Continental Resources is included as part of this report due to the timing of the scoping issue identification.

Basis and Period of Reporting

EITI Standard Requirement 2.3: The multi-stakeholder group is required to agree to the accounting period covered by the EITI report

The period of the reconciliation is Calendar Year (CY) 2013 (January 1, 2013 through December 31, 2013). Reporting companies and government entities reported data for payments made or reported in CY 2013. The reporting currency for the USEITI Report is U.S. dollars (USD). Companies reported data at the consolidated entity level, including data for all identified subsidiary entities.

How did the Independent Administrator perform the reconciliation?

EITI Standard Requirement 5.1: "The reconciliation of company payments and government revenues must be undertaken by an Independent Administrator applying international professional standards…"

Based upon Requirement 5.1 of the EITI Standard, the IA performed the reconciliation of company payments and government revenues.

Data Collection

The IA distributed the USEITI reporting and reconciliation package to reporting companies on March 4, 2015. The package included: a cover letter summarizing the USEITI process, the Data Reporting Template, a reporting guidelines document with detailed reporting instructions, and the IRS Form 8821 which is required to authorize the IRS to disclose tax data to the IA for the reporting companies participating in reconciliation of taxes.

The reporting process included the following steps:

- Reporting companies submitted completed reporting templates directly to the IA.
- For all DOI revenue streams, ONRR managed the process of gathering data from each of the in-scope DOI bureaus and submitted the combined DOI bureau data to the IA for reconciliation.
- For reporting companies that made the decision to allow for tax reconciliation, the IRS provided the data directly to the IA for reconciliation. Due to federal tax confidentiality laws, these reporting companies have to authorize the IRS to release corporate tax payment data to the IA through the use of IRS Form 8821.

Data Reconciliation

EITI Standard Requirement 5.3 (a): "In accordance with the Terms of Reference, the Independent Administrator should prepare an EITI Report that comprehensively reconciles the information disclosed by the reporting entities, identifying any discrepancies."

The IA reconciled the data by comparing the reported amounts from the reporting companies to the reported amounts from the government entities and identifying any variance amounts. The IA then compared any variance amounts to an investigation threshold, the margin of variance.

Margin of Variance

The MSG considered and approved a margin of variance for the IA to apply during the reconciliation. The purpose of the Margin of Variance is to establish a threshold to define which variances in reported payments require further evaluation. The MSG has determined that variances below the applicable margin do not require further evaluation. Variances that are below the respective threshold are presented as-is with no further consideration. Variances that exceeded the respective threshold were subject to further evaluation and explanation.

The MSG and the IA considered the potential causes of differences between amounts reported by the in-scope reporting companies and government entities for each revenue stream included in the USEITI reconciliation process.

Based upon the magnitude and likelihood of variances for in-scope revenue streams, a variance percentage threshold and a variance floor threshold were assigned to each revenue stream.

- *The Variance Percentage Threshold*: If the variance amount when divided by the amount reported by the government was greater than the variance percentage for that revenue stream, the IA considered the variance to exceed the threshold and then assessed whether the Variance Floor Threshold applied.
- *The Variance Floor Threshold:* This was the minimum dollar threshold for a variance and only applied if a variance exceeds the Variance Percentage Threshold. If the variance exceeded the Variance Percentage Threshold and exceeded the Variance Floor Threshold, the IA performed further evaluation of the variance.

The table below outlines the Margin of Variance Thresholds applied by the IA, which were approved by the MSG.

Margin of Variance

Revenue Stream	Variance Percentage	Variance Floor
ONRR Royalties	1%	$100,000
ONRR Rents	2%	$50,000
ONRR Bonuses	2%	$100,000
ONRR Other Revenues	3%	$50,000
Offshore Inspection Fees	2%	$20,000
Civil Penalties	1%	$1,000
BLM Bonus and First Year Rentals	2%	$10,000
BLM Permit Fees	3%	$10,000
BLM Renewables	N/A	N/A

Revenue Stream	Variance Percentage	Variance Floor
OSMRE AML Fees including Audits and Late Charges	2%	$100,000
OSMRE Civil Penalties including Late Charges	3%	$0
Taxes	1%	$100,000

Where variances are greater than the Margin of Variance Thresholds, the IA requested additional transaction-level details from the government entity and reporting company and attempted to identify potential sources of the variance.

After reviewing the data provided by both the government and the reporting company, if the IA was able to identify the potential source of the variance, the IA provided an explanation. If the IA was not able to identify the potential source of the variance, the IA provided an explanation that the source of the variance could not be resolved.

Both reporting companies and government entities were given the opportunity to revise their reported amounts when the reconciliation process identified reporting errors that could be corrected, but restatement was not required. If an error was identified and a reporting company or government entity resubmitted revised numbers for a revenue stream, only the final submitted numbers are shown in the reconciliation results.

RECONCILIATION RESULTS

What are the results of the reconciliation?

TBD

INDEPENDENT ADMINISTRATOR RECOMMENDATIONS

What are the IA's recommendations?

EITI Standard Requirement 5.3 (f): "The Independent Administrator may wish to make recommendations for strengthening the reporting process in the future…"

Recommendation 1: Scoping

Observation: The Candidacy Application identified scoping assumptions for year one and calls for scoping to be revisited in year two.

Recommendation: The IA recommends that, at the beginning of the 2016 reporting period, the MSG conducts a thorough scoping including:

- Reporting companies;
- In-scope revenue streams; and
- In-scope commodities to be included in the 2016 USEITI Report.

The IA is prepared to assist the MSG in this scoping. The scoping should include communication with potential reporting companies to confirm their related payor entities prior to beginning the reconciliation process. This scoping should be performed prior to the start of the reporting and reconciliation process.

Recommendation 2: Reporting Entity Communication

Observation: The knowledge and understanding of reporting companies increased throughout the reconciliation process. MSG outreach was effective and appreciated, and the amount of communication that companies received was a large driver in their understanding of the process.

Recommendation: The MSG should consider additional outreach and communication channels about the USEITI reconciliation process. Specifically:

- The 90-day reporting period for the 2015 USEITI should be extended to 120 days with communication prior to that period;
- Webinars focused on tax reporting and reconciliation should be conducted (in addition to those on revenue reporting) targeted at the tax professionals in reporting companies and with Treasury or IRS participation;
- The IA will gather polling feedback from reporting companies on the reconciliation process in November, 2015. In early 2016, the MSG should consider this feedback and other measures identified through the polling to improve communication.

Recommendation 3: Sample Approach for Data Reconciliation

Observation: Given the scale and complexity of the U.S. extractive industries, preparation of reconciliation data as part of the 2015 USEITI Report consumed significant time and resources for both the government and reporting companies.

Recommendation: The IA recommends that the MSG consider alternative options for reconciliation that could satisfy requirements of the standard with a lower investment of time and cost in the reconciliation process. Specifically, the IA can support the MSG to develop options for consideration by the EITI International Secretariat, including:

- A sample based reconciliation approach;

- Development of a portal in which reporting companies can confirm whether revenues reported as part of the unilateral disclosure match company records;

The implementation of one or more of the approaches may enable a similar level of transparency to the current process while allowing fuller participation of reporting companies. It may also enable direction of additional resources to other areas such as outreach to the public, preparation of more detailed and interactive contextual information, sub-national reporting, and other areas identified by the MSG.

Recommendation 4: Enhanced, Phased Roll-out for the Online Report

Observation: The USEITI MSG aims to make data and information available to the general public in an engaging and user-friendly manner.

Recommendation: The IA recommends that the MSG increase the percentage of the contextual narrative that lives solely online, and create a phased roll-out for future online content updates, preferably on a quarterly basis. Moving additional content online would allow for a more engaging and accessible presentation of the contextual narrative information. The MSG could implement awareness campaigns framed around quarterly updates to the online report, which could generate increased public engagement.

Recommendation 5: Increased State, Local, and Tribal Contextual Narrative Content

Observation: In the U.S., extractive industries have impacts at the local level: some communities are more dependent on certain industries than others, and the local legal and fiscal regimes vary widely.

Recommendation: Increase state, local, and tribal contextual narrative content to provide citizens with the information most relevant to them and their local communities. In particular, include information about local, legal, and fiscal frameworks to portray different approaches to managing natural resources and extraction.