Center for Western Priorities

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Fair Share Scorecard

Ensuring Taxpayers Receive a Fair Share for America's Public Resources

By Greg Zimmerman, Claire Moser, Jessica Goad, and Matt Lee-Ashley

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Contents

1 Introduction and summary

3 Three guiding principles for fair share reforms on public lands

5 Hardrock minerals

7 Coal

9 Onshore oil and gas

11 Offshore oil and gas

13 Solar and wind

15 Geothermal

17 Conclusion

18 Endnotes

Introduction and summary

> *"Under a statute now over a century old, public lands must be transferred to private ownership at the request of any person who discovers minerals on them. We thus have no effective control over mining on these properties. Because the public lands belong to all Americans, this 1872 Mining Act should be repealed and replaced with new legislation which I shall send to the Congress."*
>
> — President Richard Nixon, February 15, 1973[1]

President Richard Nixon's 1973 request that Congress reform federal mining policy—though still unheeded—affirmed a powerful principle that guides U.S. natural resource policy: America's public lands and waters, and the energy and minerals beneath them, belong to all Americans. It follows that, as owners of these resources, American taxpayers should be entitled to their fair share of the revenues from drilling, mining, logging, and other development that takes place on public lands.

In practice, however, the outdated laws and regulations governing energy and natural resource extraction on U.S. public lands provide few protections for the fiscal interests of U.S. taxpayers. On nationally owned public lands, royalty rates for oil and gas are half the going rate on land owned by the state of Texas, coal rights are routinely sold for less than the cost of a cup of coffee, taxpayer-owned gold is mined royalty free, and local communities get no revenues from the wind and solar projects built on the public lands that are in their backyards.

Although the interests of U.S. taxpayers have been long overlooked on national public lands, there are signs of change ahead. The United States and more than 40 other countries have formed a joint effort to improve the transparency of oil, gas, and mining activities through the Extractive Industries Transparency Initiative, or EITI.[2] In a speech announcing the nation's participation, President Barack Obama said that the United States "will join the global initiative in which these industries, governments and civil society, all work together for greater transparency so that taxpayers receive every dollar they're due from the extraction of natural resources."[3]

After years of discussing the need for reforms, the U.S. government is now taking steps to ensure American taxpayers are receiving a fairer return from the leasing and development of publicly owned resources. U.S. Secretary of the Interior Sally Jewell has advanced a series of reforms that, if implemented, would collectively represent one of the largest steps forward on revenue collection policy in more than a generation. These reforms include proposals to close loopholes in the federal coal program, reduce the waste of taxpayer-owned natural gas, and modernize royalty, rental, bonding, and bidding policies for oil and gas development on federal lands.

To help inform the United States' ongoing reform efforts, this scorecard evaluates the return Americans receive for publicly owned natural resources, including oil, gas, coal, hardrock minerals, and renewable resources. Additionally, this scorecard assesses the accessibility of publicly available information on extraction and payment processes for each natural resource, the external costs that could burden taxpayers from each resource, and steps currently being taken to ensure that taxpayers receive a fair share. Hardrock minerals rate the poorest in providing taxpayers a fair share, followed by coal, oil, and gas resources.

Three guiding principles for fair share reforms on public lands

On behalf of U.S. taxpayers, the U.S. Department of the Interior, or DOI, manages the mineral and energy resources on and under national public lands and waters. To enable development, the DOI grants rights to private companies that want to extract and sell oil, gas, coal, hardrock minerals, or renewable energy.

Over the past six years, the Obama administration has undertaken a series of reforms to help modernize and rationalize the web of policies and rules that govern the extraction of these resources. Three principles should guide these reform efforts to best ensure a fair share for American taxpayers:

1. **Fair return:** Royalty rates—the share of revenues owed to American taxpayers—should be based on the true market value of the resource and set to maximize revenues generated. Additionally, leasing should be guided through a competitive process, and development should occur in a timely manner.

2. **Access to information:** Data about leasing and development—including information on leases, inspections, and sales prices—should be transparent and publicly accessible.

3. **Internalized costs:** External costs—such as air and water pollution that can have serious impacts for individuals and communities, both now and in the future—should be accounted for and embedded in the cost of development. Impacts to land and water should be offset with restoration and mitigation.

Based on these principles, this scorecard evaluates the extent to which taxpayers are receiving a fair share for the extraction and use of publicly owned resources. The criteria used for this assessment are:

- **Transparency:** What information is publicly available?

- **Fair return:** Do taxpayers receive a reasonable share of the true market value?

- **External costs to taxpayers:** What are the other negative impacts on taxpayers?

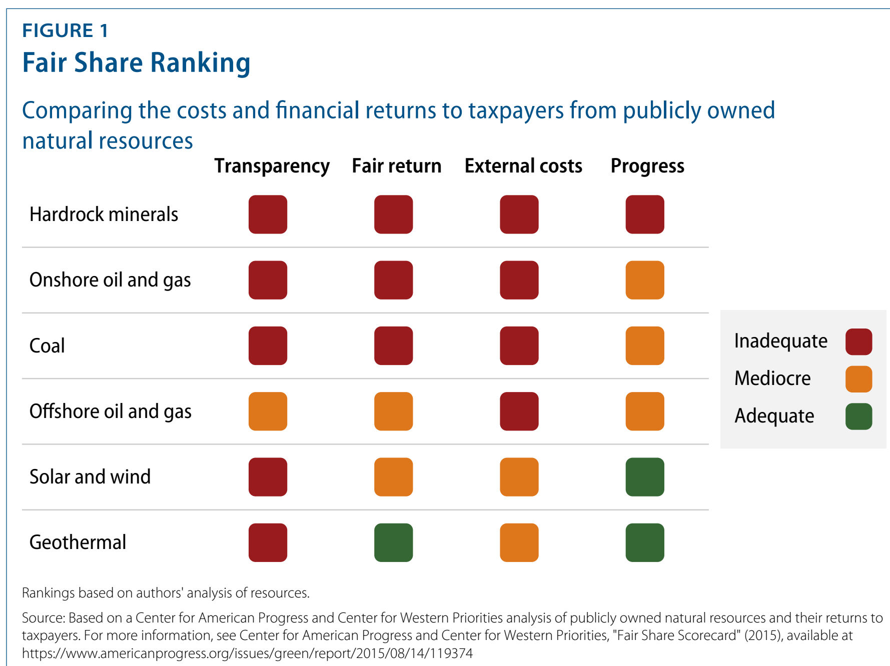
- **Progress toward collecting a fair share:** Are current steps being taken to ensure taxpayers receive a fair share?

The Fair Share Ranking below evaluates the policies that govern each category of publicly owned resource and rates them based on four criteria as red (inadequate), orange, and green (adequate). The results show that hardrock mining policies on public lands, which receive the lowest ranking in each criteria, does the worst job of ensuring a fair share for taxpayers, while geothermal energy does the best.

FIGURE 1

Fair Share Ranking

Comparing the costs and financial returns to taxpayers from publicly owned natural resources



Rankings based on authors' analysis of resources.

Source: Based on a Center for American Progress and Center for Western Priorities analysis of publicly owned natural resources and their returns to taxpayers. For more information, see Center for American Progress and Center for Western Priorities, "Fair Share Scorecard" (2015), available at https://www.americanprogress.org/issues/green/report/2015/08/14/119374

Hardrock minerals

Bottom line

Because Congress has failed to modernize the General Mining Law of 1872, taxpayers receive no return on publicly owned hardrock minerals and are instead forced to foot the bill for billions of dollars in cleanup and pollution costs. A lack of basic data collection compounds the challenge of understanding and addressing the extent of fiscal and environmental losses.

Fair Share Ranking 1st 2nd 3rd 4th 5th **6th**

Currently, hardrock mining on America's public lands is regulated under the General Mining Law of 1872, which was originally passed to encourage settlement and development in the western United States.[4] Under the law—which has not been amended in its 143-year history—mining companies pay no royalties for the minerals they mine and can purchase the rights to mine public lands for less than $5 per acre.[5] Analysts have estimated that taxpayers lose out on at least $100 million annually in royalties on the mining of more than $1 billion worth of hardrock minerals, such as gold, silver, uranium, copper, and iron.[6] Although reformers have made several unsuccessful attempts to amend the law, domestic and foreign mining companies are still not required to share any royalties with taxpayers.

The problems with the U.S. hardrock mining programs are rendered even more complicated by the lack of information collected on the amount or quality of minerals extracted from taxpayer-owned lands. According to a 2014 report by the House Natural Resources Committee, the U.S. Bureau of Land Management, or BLM, "does not require mining companies to report data on the hardrock minerals they extract from federal public domain lands."[7] The report, which is based on data obtained from the U.S. Securities and Exchange Commission, estimated that

the top 46 mines on public lands produced more than $9.5 billion in hardrock minerals in 2012 and 2013. If the federal government charged an 18.75 percent royalty on the extraction of those minerals, taxpayers would have collected nearly $1.8 billion in revenues.

While the value of minerals extracted from U.S. public lands is poorly documented, the external costs of hardrock mining are all too visible: Abandoned mines and inadequately reclaimed mine sites dot the American landscape. The 2015 mine disaster in southern Colorado, which spilled an estimated 3 million gallons of toxic waste into a tributary of the Colorado River, is a stark reminder of the impacts from past and present hardrock mining.[8] In 2011, the U.S. Government Accountability Office, or GAO, reported that four federal agencies spent $2.6 billion reclaiming abandoned hardrock mines on public lands between 1997 and 2008.[9] What's more, EPA estimated in 2000 that 40 percent of the headwaters of watersheds in the American West had been polluted by hardrock mining.[10] Still, because of the lack of data collected and maintained, the GAO noted that "there are no definitive estimates of the number of abandoned hardrock mines on federal and other lands."[11]

While a few members of Congress have introduced legislation to reform the antiquated law, these bills have not moved forward in the legislative process, and there has been no progress toward real reform.

Coal

Bottom line

As a result of loopholes in the federal coal program, outdated policies, a lack of transparency, and high external costs to taxpayers, American taxpayers are not receiving their fair share for coal mined on America's public lands.

Fair Share Ranking

tied

Coal mining on national public lands now accounts for more than 40 percent of all coal produced in the United States, 90 percent of which originates in the Powder River Basin, located in Wyoming and Montana.[12]

Under current regulations, coal companies pay a bonus bid to purchase the rights to mine coal, an annual rental payment of $3 per acre, and royalties on the coal extracted on the first sale to another company. However, recent investigations have shown that coal companies are selling coal to their own subsidiary companies to deliberately avoid paying royalties.[13]

According to Headwaters Economics, as a result of loopholes and subsidies, coal companies end up paying just an effective royalty rate of 4.9 percent—well below the 12.5 percent rate required by law.[14] If coal companies paid a 12.5 percent royalty rate on the true market value of coal, taxpayers would collect an additional $1 billion every year in coal revenues, including from coal that is exported to foreign markets.[15]

In addition to loopholes enabling the coal industry to dodge royalty payments owed to taxpayers, the federal coal program is plagued by a lack of both transparency and competition. Since 1990, more than 90 percent of all federal coal lease sales have had only a single bidder.[16] And the formula that the DOI uses to

estimate the “fair market value” of coal sold is kept confidential, as are the rates applied to each lease and the cost deductions given to coal companies.[17] This non-competitive and opaque process shortchanges taxpayers and makes the program vulnerable to fraud.

Coal mining also carries high external costs that are currently unaccounted for in U.S. policy, including costs associated with air and water pollution, public health, and climate change. According to a recent analysis from the Center for American Progress and The Wilderness Society, coal mined on federal lands in Wyoming and Montana accounts for 10 percent of all U.S. greenhouse gas emissions.[18]

The Obama administration has taken a few first steps to ensure taxpayers are receiving a fair share for coal mined on America’s public lands. Following calls for reform, the DOI introduced a proposed rule to close the loopholes that allow coal companies to intentionally dodge royalties and has also started to hold a series of “listening sessions” across the country to “seek information about how the BLM can best carry out its responsibility to ensure that American taxpayers receive a fair return on the coal resources managed by the federal government on their behalf.”[19] Despite these initial key steps, a timeline for a final rule has not been announced, and there have not been any additional commitments for reform.

Onshore oil and gas

Bottom line

Oil and gas drilling on America's public lands provides an important source of public revenue, but taxpayers continue to be shortchanged by outdated royalty, revenue, and leasing policies. Drilling decisions, meanwhile, are too often made out of the public eye without regard to the costs that will be borne by local communities.

Fair Share Ranking

The U.S. Bureau of Land Management oversees oil and gas drilling and production on the nearly 700 million acre federal mineral estate.[20] Federal onshore oil production has increased every year for the past 10 years, reaching 148.8 million barrels in 2014, or a nearly 50 percent increase since 2003.[21]

Production of oil and natural gas from federal lands is an important source of public revenue, but outdated polices shortchange American taxpayers. Under current rules, oil and gas companies pay a royalty rate of only 12.5 percent, much lower than the royalty charged by states. Most Western states charge between 16.67 percent and 18.75 percent to produce oil and gas on state-owned lands, while Texas charges a 25 percent royalty.[22] Failure to modernize the royalty rate costs taxpayers as much as $730 million annually; and Western states—which receive an even split of federal royalty revenues—are losing out on hundreds of millions of dollars as well.[23]

In addition to outdated royalties, oil and gas companies pay next to nothing to acquire and hold onto oil and gas leases. A company can acquire a lease on public lands for as little as $2.00 per acre, which is the minimum bid allowed. In 2014, oil and gas companies bought the rights to drill nearly 100,000 publicly owned acres at $2.00 per acre.[24] Companies can also hold onto these leases for an annual rental payment of only $1.50 per acre, a rate that has not been updated in decades and that

independent analysts argue is too low to encourage companies to diligently develop leases.[25] Even a small increase in rental rates would generate more than $50 million annually and would encourage companies to bring idled leases into production.[26]

Not only are oil and gas companies that operate on our national public lands systematically shortchanging American taxpayers, but the current system is also designed to shield companies from public scrutiny.[27] Under current rules, companies can nominate public lands for lease and development in secret, without providing a company name.[28] This practice is allowed despite a district court judge ruling in 2013 that the identity of the company nominating lands "may be relevant [to those] who may raise concerns about the stewardship records of the potential owner, a factor relevant to the environmental impact of the proposed sale."[29]

Additionally, BLM's system for tracking leasing and development is outdated and opaque. The agency's LR2000 database, or the Land & Mineral Legacy Rehost 2000 System, lacks basic functionality for making even the most common queries. As a result, it is virtually impossible for an interested citizen to track the disposition of leases or the location of producing oil and gas wells.[30] Additionally, key information on new leases—such as which companies are placing bids, the location of new leases, the volume of resources leased, and the value of recently sold leases—is not maintained in a central repository.

Finally, developing oil and gas resources on public lands comes with well-documented external costs. Companies are currently permitted to vent and flare natural gas as a "waste" during oil production without making royalty payments to the American taxpayers. Methane, the main component of natural gas, is a potent greenhouse gas; it is 34 times more powerful than carbon dioxide.[31] Oil and gas development fragments landscapes—imperiling healthy wildlife populations—while oil and other chemicals spills from drilling operations risk contaminating public lands and waters.[32]

While taxpayers continue to be shortchanged for oil and gas resources from America's public lands, the Obama administration has signaled that it could take much-needed reforms in a few of these areas. In April, the Obama administration issued an Advance Notice of Proposed Rulemaking, or ANPR, to accept public comment on how to reform royalty rates, bonding requirements, minimum bids, and rental rates. The ANPR is a critical opportunity for the administration to take needed steps. Additionally, the administration is currently in the process of developing a rule to reduce methane emissions from venting and flaring of natural gas on America's public lands.

Offshore oil and gas

Bottom line

Steps have been taken to ensure America taxpayers receive a fair return from offshore oil and gas development. But old policies still on the books—and the inherent risk associated with offshore drilling—mean that taxpayers continue to be exposed to significant liabilities from offshore oil and gas development.

Fair Share Ranking: 1st 2nd **3rd** 4th 5th 6th

Drilling for oil in the waters off America's coasts came under the microscope in the aftermath of the 2010 Deepwater Horizon oil spill, which released nearly 5 million barrels—or more than 200 million gallons—of oil into the Gulf of Mexico.[33] Images of oil slicked beaches and dying wildlife brought the risks of offshore drilling into the living rooms of all Americans.

As the Gulf spill has receded from public view, the Obama administration has taken some steps to improve the safety of offshore drilling. Additional federal inspectors, for example, have been hired to monitor drilling activities and help avoid future accidents.[34] Companies must also meet new standards for testing and maintaining their drilling equipment. And Congress has authorized a fee system for offshore oil and gas inspections, transferring some of the financial burden of inspections from American taxpayers onto oil companies.[35]

Both the administrations of President Obama and President George W. Bush made a commitment to ensure that Americans receive a fair return from the development of offshore oil and gas resources. Under President Bush, the DOI twice raised offshore royalty rates: first from 12.5 percent to 16.67 percent, then from 16.67 percent to 18.75.[36] Under President Obama, the DOI implemented an escalating rental rate to encourage diligent development and to make it more costly for companies to stockpile unused leases.[37]

The Obama administration has also taken steps to improve reporting and transparency for offshore drilling. In 2010, the DOI implemented a new rule requiring operators to install meters that record volumes of methane released through venting and flaring. Such measures have not been implemented for onshore leases.[38]

Still, many issues remain unaddressed, with the public bearing significant risk and companies benefiting from lax rules developed in the past. For example, American taxpayers may forego upwards of $50 billion because of a law passed in 1995 to encourage development of offshore leases during a time of low oil and gas prices.[39] The law authorized the now-defunct Mineral Management Service to provide "royalty relief" on oil and gas produced in the Gulf of Mexico, creating a massive loophole allowing companies to avoid paying royalties on leases issued between 1995 and 2000.[40]

There are also ongoing concerns over expanded offshore revenue sharing. Revenue sharing is intended to compensate states and counties for the tax-exempt status of federal public lands within their borders and to help mitigate the impacts of development.[41] Federal law grants most coastal states ownership over the mineral resources up to 3 nautical miles off their coast; states keep 100 percent of the royalty revenues generated in this area.[42] Mineral resources beyond the 3-mile threshold is reserved for American taxpayers, and any plans to expand revenue sharing will result in financial losses to American taxpayers.

Solar and wind

Bottom line

The Department of the Interior and Congress have both taken important steps to provide a fair share to taxpayers for wind and solar, but those rules and laws have not yet been finalized.

Fair Share Ranking: 1st **2nd** 3rd 4th 5th 6th

Renewable energy production from public lands is growing rapidly. Over just the past six years, the DOI has approved 52 commercial-scale solar, wind, and geothermal projects on public lands across the West.[43] Before 2009, there were only a handful of wind and geothermal projects on public lands and no solar projects.

Currently, the Bureau of Land Management oversees 39 wind energy projects on public lands with a capacity 5,557 megawatts, and it has approved the construction of 33 utility-scale solar energy projects with a capacity of more than 9,000 megawatts.[44]

Because solar and wind are a growing share of the energy harnessed on public lands, the rules and regulations governing them are still playing catch-up, especially when it comes to fair returns for taxpayers. As an example, wind and solar energy projects are authorized by a first-come-first-served right-of-way process on public lands, rather than more stable—and competitive—leases.[45]

The federal government is taking steps to ensure that taxpayers get a fair return from the solar and wind energy projects constructed on public lands. Unlike other forms of energy development, neither Congress nor the agencies have established rules and regulations to govern how wind and solar development should proceed.

The DOI and BLM recently proposed new regulations—drafted in September 2014 and scheduled to be finalized by October 2015—to ensure fair returns for taxpayers for wind and solar development on public lands.[46] In addition to closing gaps in federal policies and ensuring more predictability and certainty for permitting, the new essential regulations offer remedies to a number of shortcomings regarding fair market value for solar and wind, including:[47]

- A new regulatory framework for competitive leasing for wind and solar in selected locations
- Updates to rental rates so that they vary by county and land values
- Establishment of megawatt capacity fees, similar to royalties on fossil fuel extraction

Another ongoing problem with solar and wind energy development on public lands is that the BLM does not have the authority to direct where revenues go. Unlike other energy resources, where a portion of revenues are shared with states or counties, all of the revenues from solar and wind development are deposited into the U.S. Treasury.[48] Some members of Congress are working to provide this authority to the agency with the Public Lands Renewable Energy Development Act.[49]

In terms of transparency, the solar and wind programs have a long way to go. This is partly due to the first-come-first-served right-of-way process in which solar and wind projects are authorized. As one observer put it, this approach "avoids many of the usual avenues for public input."[50]

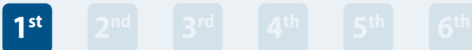
Finally, wind and solar energy development do not have nearly the scale of negative externalities as other energy resources. Wind and solar energy development cause very few greenhouse gas emissions when compared to oil, gas, and coal and have little impact on water quality.

Much like other energy resources, however, one key negative externality is the land use demands from wind and solar projects. Both solar plants and wind farms occupy lands and have resulting impacts on ecosystems, species, and other potential uses of that land, such as recreation. With diligent planning, conflicts with competing land uses can be minimized and impacts can be mitigated.

Geothermal

Bottom line

Taxpayers are getting a modest return from their geothermal energy resources.

Fair Share Ranking 

Geothermal energy production has been occurring on public lands since the 1960s, and public lands are the source of 40 percent of the nation's geothermal energy.[51] The Bureau of Land Management currently manages 818 geothermal leases—including 59 producing leases—with a capacity of approximately 1,500 megawatts of geothermal energy.[52]

The Geothermal Steam Act of 1970, the Energy Policy Act of 2005, 2007 BLM regulations, and a 2008 programmatic environmental impact statement on geothermal energy together govern how the resource is regulated on public lands.[53] Geothermal energy management is housed under BLM's Fluid Minerals Program because the technology used to drill geothermal wells is similar to the technology used for oil and gas drilling.[54]

There are current laws in place addressing fair market value to taxpayers for geothermal energy. The Bureau of Land Management states that "geothermal leases generate over $12 million in Federal royalties each year, with 50 percent shared with the states and 25 percent shared with local counties."[55]

Importantly, geothermal leases are sold under a competitive leasing process, although Congress passed legislation in 2014 that allowed for noncompetitive leasing in certain limited circumstances.[56] Lessees also are required to pay rental

fees, currently set at $2 to $3 per acre per year for competitive leases and $1 per acre per year for noncompetitive leases—both of which increase to $5 per acre per year after 10 years.[57]

Finally, geothermal royalties are assessed on "'gross proceeds' from the sale of electricity … multiplied by a royalty rate established by the BLM."[58] More specifically, those rates, as defined by regulation, are "1.75 percent of gross proceeds for the first 10 years of production and 3.5 percent for subsequent years of production."[59]

When it comes to transparency, the geothermal leasing program has historically had trouble properly collecting data to ensure that taxpayers receive a fair return. For example, the Government Accountability Office wrote in 2007 that "about 40 percent of [the DOI's geothermal] royalty data was either missing or erroneous."[60] And in 2009, the Department's Inspector General testified on two investigations regarding geothermal leases:

> *We have learned that current regulations allow a producer to claim operating deductions of up to 99 percent of the royalty owed. The companies currently under investigation have allegedly claimed the 99 percent deduction from their owed royalties for as many as 10 years.*[61]

Finally, in terms of externalities, geothermal electricity is renewable and emits far fewer air emissions—including carbon dioxide and sulfur dioxide, among others—than fossil fuels such as coal and natural gas.[62] A report from the geothermal energy industry's trade association notes that "the public benefits from clean energy produced in California and Nevada are worth more than $117 million annually."[63] Other positive attributes of geothermal energy development include a relatively small physical footprint and the ability to use and reuse wastewater in operations.

Geothermal energy development has come under some criticism, however, for its use of technology, including hydraulic fracturing, to drill wells that can result in earthquakes.[64]

Conclusion

President Obama's pledge that the United States will fulfill its commitments under the Extractive Industries Transparency Initiative is a much-needed call to action to modernize and reform federal natural resource policies. These reforms—which have already begun in some agencies within the DOI—should first and foremost prioritize the public interest over simple private gain.

Guarding the financial interests of taxpayers today and over the life of a project, for example, will require changes in royalty, bidding, and rental policies. To reduce the risk of waste, fraud, and abuse, agencies will need to redouble their commitment to making data easily accessible. To avoid saddling communities with unwanted environmental or public health costs, federal energy policy will need to account for the externalities associated with energy extraction, thus helping level the playing field among cleaner and dirtier fuel sources.

Although the United States has started the long-overdue task of modernizing its energy programs to better safeguard taxpayers, it will take the determination and urgency of policymakers to ensure that America's natural resources are managed more fairly, honestly, and responsibly.

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