

Using Public Lands for the Public Good

Rebalancing Coal and Renewable Electricity
With a Clean Resources Standard

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Introduction and summary

Federal public lands and waters are inextricably linked to our health and economic well-being as Americans. Although it may not be apparent on a daily basis, the decisions made regarding the more than 700 million acres of lands¹ and more than 1 billion acres of offshore waters² managed by the federal government on behalf of all Americans have very real impacts on the economy and society. As Gifford Pinchot, the first chief of the U.S. Forest Service (1905-1910) put it, the public estate can and should be managed to provide "the greatest good for the greatest number" of people. As such, public lands and waters have the potential to serve Americans in ways that ensure a healthier society and a stronger economy.

This progressive framework of land management can be seen on many protected areas that are open for everyone to visit and enjoy. Activities like recreation in a national park, hunting in a national wildlife refuge, or fishing near a national seashore are the result of land management for the public good. And, public lands that are managed for conservation—where development is rightfully restricted—can have positive economic impacts on small businesses and the economy. In 2010, for example, recreation on lands managed by the U.S. Department of the Interior provided 388,000 jobs.³ Additionally, the nation's approximately 100 million acres of wilderness⁴ has been shown to afford a variety of economic benefits.⁵

But public lands that are managed for "multiple use"—where natural resource extraction is permitted—should also advance the public good, especially with regard to our country's electricity needs. We extract or utilize many different raw materials from the federal estate that are then used to produce electricity. Currently, approximately 43 percent of all the coal and 20 percent of the natural gas produced in the United States comes from public lands or waters. The converse is true when it comes to renewable energy derived from them—despite their tremendous potential—only 1 percent of the country's wind and practically none of its solar power are derived from the public estate. As of this writing, there was only one solar project generating electricity located on public lands, although 15 additional solar projects have been approved.

This small amount of renewable energy represents a missed opportunity to use public lands and waters to model a new energy future. Huge potential exists to responsibly develop publicly owned renewable resources that will help us move away from dirty fossil fuels toward cleaner electricity options that will support a healthier society.

To set us on a path for achieving this opportunity, we recommend that a "clean resources standard," or CRS, for public lands and waters be implemented by executive order. This would require land management agencies to delineate what portion of publicly owned natural resources used for electricity generation will be clean and renewable—from wind, solar, geothermal, biomass, and small hydroelectricity. We recommend the entirely achievable target of 35 percent renewable electricity from public lands and waters by 2035.

Of course, any energy development on public lands must be done in a way that avoids sensitive areas, uses the most modern technology, and is in full compliance with environmental laws. When done responsibly, energy development is an appropriate use of public lands, but it should not be done at the expense of the clean air, clean water, and the recreational opportunities that they provide.

To explore the prospects of and need for a clean resources standard, we analyzed the types and amounts of the publicly owned natural resources that are currently being used to help address the country's electricity needs. To accomplish this, we imagined that the Interior Department and the Forest Service were an electric utility that "delivers" power to consumers by providing the raw materials for electricity generation.

Under this analogy, we looked at the entirety of resources extracted from public lands and waters that are used for electricity generation. We found that federal lands predominately provide coal for electricity—currently, approximately 66 percent of the electricity generated from the resources that belong to all Americans comes from coal, while 15 percent comes from renewable resources, including hydropower, and only 1 percent is derived from solar, wind, and geothermal projects combined. This composite is shown in the graph at left.

Our analysis shows that coal is the de facto priority for the use of the federal estate when it comes to power generation. This is a stunningly antiquated and out-ofbalance view of our nation's electricity needs because the scale is tipped in favor of a dirty electricity resource that has been shown to have serious health and environmental impacts. It also neglects the opportunity that federal lands and waters provide to reflect a vision for a clean energy future.

FIGURE 1 **Current makeup of** electricity generated from resources from public lands and waters Coal, 65.6% Petroleum, 0.8% ■ Natural gas, 18.3% Conventional hydroelectric, 14.2% Geothermal, 0.9% Solar, 0% ■ Wind, 0.1%

Decades of research about the impacts of the mining and combustion of coal has clearly demonstrated that it has negative impacts on our health and environment. Coal has significant environmental, health, and economic costs, leaving no doubt that we should decrease our dependence on it for electricity generation. As the late Paul Epstein of the Center for Health and the Global Environment at Harvard Medical School noted:

The public is unfairly paying for the impacts of coal use... Policymakers need to evaluate current energy options with these types of impacts in mind. Our reliance on fossil fuels is proving costly for society, negatively impacting our wallets and our quality of life.7

Coal is a major contributor to rising carbon pollution, which is already changing the natural world as we know it, potentially costing us billions of dollars in damage. This is especially the case with regard to our lands, waters, and oceans, which are beginning to feel the strain of rising global temperatures—from glaciers melting creating sea-level rise to flora and fauna migrating northward.

Also, coal benefits from a number of taxpayer subsidies that make its price artificially low, including loopholes in the tax code and an outdated leasing system on public lands that call into question whether or not Americans are receiving fair market value for the use of public resources. These issues will be further explored later in the report.

In addition to helping to avoid catastrophic global warming, the transition to a clean energy economy has the added benefit of improving our nation's infrastructure and creating more jobs. In a previous analysis, the Center for American Progress showed that solving global warming and moving toward a clean energy economy can "provide an opportunity for more broadly shared prosperity through better training, stronger local economies, and new career ladders into the middle class."8 A clean energy economy could have wide impacts on markets, financing, infrastructure, and jobs across America.

The Obama administration has taken the first steps toward this transition using the resources found on public lands and waters—in addition to the handful of renewable projects already operating onshore, 29 new solar (concentrating solar and photovoltaic), wind, offshore wind, and geothermal projects were approved by the end of 2011.

Yet despite this progress, our analysis of federal land management agencies as if they were an electric utility clearly shows that renewable electricity on public lands and waters is a mere whisper compared to the amount from coal produced from these areas. Even when we look at projections for solar, wind, and geothermal energy on public lands and waters over the next 20 years, we find that coal would still provide 57.3 percent of the electricity, with renewables, including hydropower constituting 25.9 percent, while wind, solar, and geothermal combined would provide only 13.5 percent. If we are to use public lands and waters to help grow a clean energy economy, additional policy steps will need to be taken.

In addition to the proposed clean resources standard described earlier, we also call for a number of additional policy initiatives that should be implemented to begin to adjust the balance of coal and renewables from public lands and waters used for electricity so that it adheres more closely to a progressive framework for land conservation, energy development, and climate change solutions.

We mostly focus on the actions that can be achieved with executive authority as Congress has already given the president and federal agencies broad authority to implement energy policies on public lands.

Some proposals, however, would require Congress to act. To achieve a balance between coal and renewable electricity we recommend policies that:

- Put a carbon price on coal mined on public lands
- Reform the leasing process for coal mined on public lands to achieve fair market value
- Establish renewable energy zones on public lands and waters
- Include public lands and waters in the executive order on sustainability to better track the government's carbon pollution
- Ensure that all federal environmental analyses include scientific carbon pollution studies

It is imperative that the administration and Congress take measurable steps to address the chasm between fossil and renewable electricity generated from public lands and waters. Land conservation—identifying places that are not appropriate for industrial energy development—while also an essential component of a balanced energy strategy, is for the purposes of this report a separate topic. A plan for a long-term phase-in of renewables and a subsequent rebalancing of fossil fuels sourced from the federal estate will help ensure the public's lands are actually being used for the public good.

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