Creating the Clean Energy of Tomorrow and Protecting the Environment and Natural Resources

We now face a make-or-break moment for the middle class and those trying to reach it. After decades of eroding middle-class security as those at the very top saw their incomes rise as never before and after a historic recession that plunged our economy into a crisis from which we are still fighting to recover, it is time to construct an economy that is built to last. The President's 2013 Budget is built around the idea that our country does best when everyone gets a fair shot, does their fair share, and plays by the same rules. We must transform our economy from one focused on speculating, spending, and borrowing to one constructed on the solid foundation of educating, innovating, and building. That begins with putting the Nation on a path to living within our means – by cutting wasteful spending, asking all Americans to shoulder their fair share, and making tough choices on some things we cannot afford, while keeping the investments we need to grow the economy and create jobs. The Budget targets scarce federal resources to the areas critical to growing the economy and restoring middle-class security: education and skills for American workers, innovation and manufacturing, clean energy, and infrastructure. The Budget is a blueprint for how we can rebuild an economy where hard work pays off and responsibility is rewarded.

Building on the Administration's progress to make the U.S. the global leader in the clean energy race and protect the environment for generations to come, the 2013 Budget will:

Support American Leadership in Clean Energy. Moving toward a clean energy economy will improve the air we breathe and the water we drink and enhance our energy security by reducing dependence on oil. Clean energy will play a crucial role in slowing global climate change and meeting the President's goals of cutting greenhouse gas emissions in the range of 17 percent below 2005 levels by 2020, and 83 percent by 2050. Just as important, ensuring that the Nation leads the world in the clean energy economy is an economic imperative. To support these goals, the President's Budget provides an additional \$5 billion for 48C tax credits for advanced energy manufacturing, which would incentivize more than \$20 billion in private sector investment; extends the Production Tax Credit for renewable energy generation; extends the Section 1603 payments in lieu of tax credits for renewable energy deployment and then replaces them with a refundable tax credit beginning in 2013; and provides approximately \$6.7 billion across the Government to support the advancement of clean energy technologies, about \$760 million (13 percent) above the 2012 enacted level. Department of Energy (DOE) funding makes up 74 percent, or \$4.9 billion, of the total funding. DOE funding includes:

• \$2.3 billion for the Office of Energy Efficiency and Renewable Energy (EERE) to advance state-of-the-art clean energy technologies. Within EERE, the Budget increases funding by nearly 80 percent for energy efficiency initiatives that will improve America's competitiveness and increase our energy productivity, saving consumers and businesses money. EERE is also funding research, development, and demonstration to advance renewable electricity generation that includes \$310 million for the SunShot Initiative to make solar energy cost-competitive nationwide without subsidies by the end of the decade;

\$95 million for wind energy, including off-shore wind technologies; and \$65 million for geothermal energy and enhanced geothermal systems.

- \$350 million for the Advanced Research Projects Agency-Energy (ARPA-E) to support transformational research in clean energy in areas such as solar energy, energy storage, carbon capture and storage, and advanced biofuels.
- \$12 million as part of a \$45-million priority research and development initiative by the Departments of Energy, the Interior, and the Environmental Protection Agency to understand and minimize the potential environmental, health, and safety impacts of natural gas development through hydraulic fracturing (fracking).

Save Manufacturers Money by Improving Energy Efficiency. The President's Advanced Manufacturing Partnership invests in a national effort to develop and commercialize emerging technologies that will create high quality manufacturing jobs and enhance our global competitiveness. As an integral part of this initiative, the Budget provides DOE with \$290 million to expand research and development for innovative manufacturing processes and advanced industrial materials that will enable U.S. companies to cut the costs of manufacturing by using less energy, while improving product quality and accelerating product development. Also, by coordinating across Federal agencies and collaborating with the private sector, the Advanced Manufacturing Partnership will provide the platform for inventing new manufacturing technologies, speeding ideas from the drawing board to the manufacturing floor, scaling-up first-of-a-kind technologies, and developing the infrastructure and shared facilities to allow small and mid-sized manufacturers to innovate and compete in the global market. The Budget also continues to support the development of competitive new manufacturing processes for advanced vehicles, biofuels, solar energy, and other new clean energy technologies to help ensure that these technologies are invented and manufactured in the U.S.

Reduce Building Energy Use. The 80 billion square feet of non-residential building space in the United States present an enormous opportunity to realize large gains in energy efficiency, which save money and reduce pollution. In 2010, commercial buildings consumed roughly 20 percent of all energy in the U.S. economy. The Administration continues to call on the Congress to pass the HomeStar bill, or other mandatory funding legislation aimed at creating jobs by encouraging Americans to invest in energy saving home improvements. The Budget also provides \$310 million for DOE Building Technologies Program, an increase of \$91 million (or 41 percent) above 2012 to support accelerated research and development for innovative building efficiency technologies and the continued introduction of consensus-driven appliance efficiency standards, which provides manufacturers with the regulatory certainty they need and helps save consumers money. As part of the Better Buildings Initiative and consistent with the President's Executive Order on sustainability, the Administration has committed to improve the energy efficiency of all Federal buildings (representing over 3 billion square feet) with agencies' total investment to exceed \$2 billion through performance-based contracts over the next two years, all at no net cost to the taxpayer. This is achieved through contracts that provide enough savings in energy to more than pay for the investments.

Open Federal Lands to Clean Energy Generation. The vast acreage of Federal land holdings presents an opportunity for the Nation to smartly and sustainably facilitate large-scale clean energy projects. The Budget includes \$86 million to review and permit new renewable energy projects on Federal lands, with the goal of permitting at least 11,000 megawatts of new solar, wind, and geothermal electricity generation capacity affecting Department of the Interiormanaged lands by the end of calendar year 2013. These investments in clean energy will diversify the sources of generation on our electric grid, improve air quality and cut carbon pollution.

Implement Historic Fuel Economy Standards and Support Reductions in Carbon Pollution. EPA will continue to collaborate with Federal and State agencies to seek cost-effective strategies to reduce greenhouse gas (GHG) emissions. In 2013, EPA, working with the Department of Transportation, will continue to implement a national program to reduce GHGs from light-duty and heavy-duty mobile sources of GHGs. The Administration's national program of fuel economy and greenhouse gas standards for light duty vehicles alone will save approximately 12 billion barrels of oil and prevent 6 billion metric tons of GHG emissions over the lifetimes of the vehicles sold through model year 2025. Additionally, EPA will continue to develop regulatory strategies to control GHG emissions from major stationary sources. The Administration also maintains funding levels for partnership and voluntary programs like Energy Star, which help conserve energy and cut utility bills.

Prioritize Funding for the Environment and Public Health. The Environmental Protection Agency's mission is to protect human health and the environment. Because the tight fiscal environment requires more targeted use of limited funds, the Budget includes \$8.3 billion to continue to deliver on this mission, a decrease of \$105 million from 2012 enacted levels. Funding is increased in priority areas, such as enforcement of environmental and public health protections in the Agency's operating budget (a 5 percent increase), and for grants to support State and tribal implementation of delegated environmental programs (a 10 percent increase). These programs will allow the Administration to build on historic progress in reducing air pollution from power plants, improving the quality of our waters, restoring priority ecosystems, reducing exposures to toxic chemicals, and supporting healthier communities. The Budget also provides \$2 billion total for the State Revolving Funds (SRFs). While a decrease of \$359 million from FY 2012 enacted levels, this level will still allow States to finance over \$6 billion in water infrastructure projects annually. The Budget also reduces the Superfund Remedial program by \$33 million and eliminates \$50 million in outdated, underperforming, and overlapping programs.

Conserve Landscapes and Ecosystems as a part of the America's Great Outdoors Initiative. The Budget leverages and integrates efforts of the U.S. Forest Service, the Fish and Wildlife Service, the National Park Service, and the Bureau of Land Management, along with States, Tribes, and others, to conserve the most critical landscapes. The Administration maintains support for land management operations and proposes funding Land and Water Conservation Fund programs in the Departments of the Interior and Agriculture at \$450 million, a 30 percent increase over the 2012 enacted level. These funds are vital to the protection of air and water quality and conserving open spaces for current and future generations to enjoy. Of this amount, \$270 million is proposed to conserve lands within national parks, refuges, and forests, including \$109 million in collaborative funds for Interior and the U.S. Forest Service to jointly and strategically prioritize and conserve the most critical landscapes. The Administration also

sustains funding for key grant and partnership programs, such as historic preservation and wildlife protection programs, and reauthorizes DOI's authority under the Federal Land Transaction Facilitation Act to use proceeds from the sale of low-conservation value lands to acquire additional high-priority conservation lands.

Support Cooperative Conservation Efforts to Adapt to Climate Change. The Budget continues support for cooperative landscape conservation in the face of climate change and other environmental stressors. The Administration proposes an increase of \$18.5 million, or 13 percent, above the 2012 enacted level. The increase includes \$8 million for U.S. Geological Survey supported science to be used by Federal land managers in adapting to changing conditions across our landscapes. The Fish and Wildlife Service, along with the National Park Service, will also support their own managers with the tools to inventory changes and adapt management practices with a \$4 million and \$5 million increase, respectively. The Bureau of Indian Affairs will also provide a \$1 million increase to better integrate work through the Landscape Conservation Cooperatives with tribal interests. These funding levels provide the critical science to support Interior's \$97 million Climate Change Wildlife Adaptation initiative, which represents an increase of 11.5 percent from FY 2012.

Improve Water Quality Outcomes from Private Lands Conservation. The Budget maintains support for Farm Bill conservation programs that provide technical and financial assistance to help private landowners and agricultural producers address a broad range of resource concerns. It builds upon the collaborative process already underway among Federal partners to demonstrate substantial improvements in water quality from conservation programs by ensuring that USDA's key investments through Farm Bill conservation programs and related efforts are appropriately leveraged by other Federal programs.

Provide Funding for Key Conservation Programs. The Budget provides \$1.4 billion for the Environmental Quality Incentives Program (EQIP) to help private landowners and agricultural producers implement a broad range of conservation practices. Programs like EQIP have been instrumental in the agency's ongoing efforts to partner with private landowners and restore habitat for species such as the Greater Sage Grouse and the Lesser Prairie Chicken. It assumes no new enrollments in the Wetlands Reserve Program (WRP) and Grasslands Reserve Program (GRP), as Farm Bill authorization to enroll new acreage in both programs expires in FY 2012. The President's Budget provides for ongoing restoration and easement monitoring for WRP and GRP in FY 2013.

Work to Restore the Gulf Coast Ecosystem. The Administration remains committed to restoring and protecting the Gulf Coast ecosystem following the BP Deepwater Horizon oil spill. The Federal and State Gulf Coast Ecosystem Restoration Task Force established by Executive Order in 2011 recently released its restoration strategy. As Chair of the Gulf Coast Ecosystem Restoration Task Force, the EPA Administrator will help lead environmental recovery efforts in the region in support of the strategy, and. USDA will continue implementing its Gulf of Mexico Initiative to help improve water quality flowing from private lands into the Gulf... Additionally, the Administration continues to support dedicating a significant amount of any Clean Water Act civil penalties resulting from the Deepwater Horizon oil spill for Gulf recovery.

Consolidate Forest Restoration Programs. On the heels of USDA's report on increasing the pace of forest restoration and job creation, the Budget continues to emphasize the Forest Service's ability to manage and restore our Nation's forests through landscape scale efforts, primarily the proposal for an Integrated Resource Restoration (IRR) line item which includes activities funded previously through several other budget line items. This streamlined approach will improve forest management efficiency, enabling more work and workers in the woods, while also improving outcomes on the ground. The \$74 million decrease in funding for hazardous fuels is due primarily to a shift in funding from the Hazardous Fuels line item to IRR for fuels treatments outside of Wildland Urban Interface.

Implement the National Ocean Policy. The National Ocean Policy provides a comprehensive approach, based on science and technology, to uphold our stewardship responsibilities for marine ecosystems. The goals for 2013 are to implement strategic action plans, develop a national information management system, and support regionally-based coastal and marine spatial planning. The Budget provides strong support for the National Oceanic and Atmospheric Administration (NOAA) including funding for regional ocean partnerships and integrated ecosystem assessments, while NOAA and DOI jointly support data integration and management. Additional funding is also proposed to expand fisheries stock assessments and operationalize innovative marine sensor technology. Priority activities also include understanding changing conditions in the Arctic; improving observations, mapping, and infrastructure; finding permitting and regulatory efficiencies; and increasing resiliency and adaptation of coastal communities and marine ecosystems to climate change and ocean acidification.

Understand and Accurately Project Climate Change and its Impacts. The U.S. Global Change Research Program (USGCRP) integrates Federal research and solutions for climate and global change. A new strategic plan will guide interagency investments in the Budget, including support for a National Assessment of the science, impacts, and strategies for responding to climate change. The Budget provides \$2.6 billion for USGCRP programs, an increase of nearly \$140 million (6 percent) above the FY 2012 enacted level. This includes an increase of \$25 million for NOAA's competitive climate research grants and \$70 million for NASA's earth science research and missions.

Support Chesapeake Bay Restoration. The Budget continues its strong support for Chesapeake Bay restoration by requesting \$73 million for EPA's Chesapeake Bay Program Office, an increase of \$15 million above the 2012 enacted level, which will help EPA and State and local governments meet the nutrient pollution reduction goals of the Bay's Total Maximum Daily Load (TMDL). Additionally, in support of the Executive Order regarding Chesapeake Bay restoration, EPA, USDA, NOAA, DOI, DOD, and other agencies will continue to work closely together to improve water quality and restore habitat in our Nation's largest estuary.

Advance Ecosystem Restoration and Conservation in the Everglades and South Florida. The Budget builds on existing efforts to protect and restore the Everglades ecosystem, with a Government-wide investment of \$246 million, including approximately \$161 million for the Army Corps of Engineers, \$71 million for the Department of the Interior, and \$12 million for USDA. This includes \$153 million for construction and \$8 million for operations and maintenance to advance important ecosystem restoration work in South Florida, including the

Everglades. Funding for construction is \$11 million, or 7 percent, above the 2012 enacted level, which will allow for an aggressive ecosystem restoration program that will advance key construction projects, including: Picayune Strand, Indian River Lagoon South, Site 1 Impoundment, and the Kissimmee River. Interior's FY 2013 Budget includes \$71 million to restore and preserve the Everglades ecosystem. This includes sustained funding for the operations and maintenance of national parks and national wildlife refuges, and planning, research, and interagency efforts to restore the Everglades ecosystem, including protecting threatened and endangered species. The Budget also provides \$8 million to complete the one-mile Tamiami Trail bridge in 2013, and \$3 million to help establish the Headwaters National Wildlife Refuge and Conservation Area. Amounts proposed will also provide for continued work with private landowners and agricultural producers to improve water quality and quantity and habitat conservation in the region through the Environmental Quality Incentives Program, Wildlife Habitat Incentives Program, and Farm and Ranchland Protection Program.

Continue the Great Lakes Restoration Initiative. The Budget provides \$300 million (same as FY 2012 enacted) for the EPA-led interagency Great Lakes Restoration Initiative (GLRI), which will help address the most critical issues in the region, such as contaminated sediment, habitat loss, invasive species, and nonpoint source pollution. GLRI funds, coupled with agencies' significant base Great Lakes funds, will help accelerate environmental progress in the world's largest freshwater system.

Increase Support for USDA Water and Wastewater Grants and Loans. The Budget provides an increased program level of \$1.4 billion (15 percent above the 2012 enacted level) for USDA water and wastewater grants and loans to meet the performance goals of the program and to ensure that funding is adequate to maintain assistance for the water and wastewater infrastructure in rural America.

Invest in Regional and Community Planning Efforts for Sustainable Development. The Budget continues to support the multi-agency Partnership for Sustainable Communities, which aims to lower the cost of living while improving the quality of life for families and is one of the pillars of the Administration's place-based agenda. The Budget provides the Department of Housing and Urban Development (HUD) \$100 million to create incentives for more communities to develop comprehensive regional and local housing and transportation plans that result in sustainable development, reduced greenhouse gas emissions, and increased transit-accessible housing. As a part of this effort, up to \$3 million will be used to improve energy efficiency in HUD-assisted public and privately-owned housing through better energy use data collection and analysis. HUD's funds are used in combination with DOT's funding for strengthening State and local infrastructure planning capacity and EPA's technical assistance. The Budget also provides \$4 billion for DOT's Livable Communities program, which will focus resources on place-based planning, policies, and investments to help communities increase transportation choices and access to transportation services.

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