



Issue Brief

Obama Administration FY 2015 Budget Proposal: Sustainable Energy, Buildings, Transportation and Climate

March 2014

President Obama released his **\$3.9 trillion fiscal year (FY) 2015 budget proposal** for the federal government on March 4, 2014. The budget reflects the administration's "all of the above" energy strategy as well as its reinvigorated focus on addressing climate change, following the unveiling of the President's Climate Action Plan in June 2013. The proposed 2015 budget increases the Department of Energy's (DOE) funding by 2.6 percent over 2014 enacted levels, but reduces the Environmental Protection Agency's (EPA) by 3.8 percent.

Highlights include a \$1 billion **Climate Fund** to help local communities adapt to and recover from the extreme weather – droughts, hurricanes and floods – that climate change is already making more prevalent. The budget also calls for a \$56 billion infrastructure package developing a "resilient infrastructure that would help our communities prepare for the effects of climate change." Related initiatives seek to make the electricity grid more resilient, not only to disasters but to attacks as well. Also of note is a requested increase of 26 percent over 2014 appropriations for the **Department of Transportation**. The increase would go some ways to address the \$86 billion maintenance backlog that bedevils the country's transportation infrastructure, and help fund more energy efficient modes of transportation.

The budget once again repeats the President's call for the elimination of \$4 billion in fossil fuel subsidies, while proposing to make tax credits for renewable energy production permanent. The administration has requested additional funds for natural gas research which it views as assisting its goal of transitioning the United States to a low-carbon economy, as the additional funds will finance the development of **carbon capture and storage technology** for use in coal and natural gas power plants.

This fact sheet outlines the Obama administration's FY 2015 budget request for several clean energy and infrastructure programs within key agencies.

DEPARTMENT OF ENERGY

The President's FY 2015 budget request for the Department of Energy (DOE) is **\$27.9 billion, an increase of 2.6 percent** over FY 2014 enacted levels, compared to an overall federal budget increase of 0.1 percent. The proposed budget emphasizes the role of the DOE in helping the United States lead the world in the fight against climate change and the development of a clean energy economy. The DOE budget request strongly supports the President's new Climate Action Plan (CAP), announced June 2013, which seeks to reduce domestic greenhouse gas emissions to 17 percent below 2005 levels by 2020.

The 2015 request increases the **Office of Energy Efficiency and Renewable Energy (EERE)** budget almost **22 percent** over 2014 enacted levels, to \$2.3 billion. The Office of Electricity Delivery and Energy Reliability would grow over 22 percent to \$180 million, with a 182 percent increase in funding for **energy infrastructure resiliency**, a 67 percent increase for **smart grid R&D**, and a 25 percent increase for **energy storage**. The **Office of Fossil Energy** would **shrink by 8.8 percent** to \$711 million. The **Office of Nuclear Energy's** budget would be reduced by 2.8 percent to \$863 million.

The DOE science budget, which funds major research projects, would increase 0.9 percent over FY14 enacted funds to \$5.1 billion. The budget also provides \$325 million for the Advanced Research Projects Agency – Energy (ARPA-E), an increase of over 16 percent. ARPA-E funds advanced high potential, high impact energy technologies that industry is unlikely to undertake because of the high risks involved. In 2015, ARPA-E plans to invest \$150 million to catalyze breakthroughs across the spectrum of energy technologies. With the remaining proposed budget, ARPA-E plans to target gaps in storage, generation, and energy use technologies.

In addition, the Department has reorganized into three Under Secretariats: **Energy and Science, Nuclear Security, and Management and Performance.**

DOE Overall Energy Budget (Dollars in thousands)			
Program	FY 2013 Current	FY 2014 Enacted	FY 2015 Budget Request
Energy Efficiency and Renewable Energy	1,691,757	1,900,641	2,316,749
Electricity Delivery and Energy Reliability	129,196	147,242	180,000
Fossil Energy	699,059	779,290	711,030
Nuclear Energy	798,282	888,376	863,386
Office of Indian Energy Policy and Programs	1,928	2,506	16,000
Science	4,681,195	5,066,372	5,111,155
Advanced Research Projects Agency- Energy (ARPA-E)	250,636	280,000	325,000
Energy Information Administration	99,508	116,999	122,500
Loan Guarantee Program	0	20,000	7,000
Advanced Technology Vehicles Manufacturing Loan	5,686	6,000	4,000
Federal Energy Regulatory Commission (FERC) *	-279	-26,236	0
Sub Total	8,356,968	9,181,190	9,656,820

* FERC generates excess fees and recoveries.

The President’s FY 2015 Energy Efficiency and Renewable Energy budget request for DOE includes:

- **A 69 percent increase in funding for the Federal Energy Management program to \$305 million**, which provides for the establishment of a Center of Expertise for Energy Efficiency in Data Centers, and supports the sustainability and energy savings goals of federal agencies.
- **A 30 percent increase in funding for the Wind Energy program to \$115 million**, which supports the establishment of three new advanced offshore wind demonstration projects to be operational by 2017. Funding will also support wind energy R&D and the optimization of existing wind farms.
- **An almost 24 percent increase in funding for the Vehicle Technologies program to \$359 million**, which will focus on aggressive vehicle technology goals such as battery energy storage, electric drive R&D, and improvements in lightweight materials.
- **A 9 percent increase for the Bioenergy Technologies program to \$253 million**, to develop processes to source jet, gasoline and diesel fuels from cellulosic and algal-based feedstocks. The budget includes funds to build demonstration commercial-scale biorefineries in partnership with the Departments of Navy and Agriculture.
- **A 31 percent increase for the Weatherization Assistance Program to \$228 million** to meet the demand for home energy efficiency retrofits for low-income households across the country.
- **A 26 percent increase for the State Energy Program to \$63 million** to deploy clean energy plans and policies.

DOE Energy Efficiency and Renewable Energy Budget (Dollars in thousands)			
Program	FY 2013 Current	FY 2014 Enacted	FY 2015 Budget Request
Vehicle Technologies	303,165	289,737	359,000
Bioenergy Technologies (formerly Biomass and Biorefinery Systems R&D)	185,190	232,290	253,200
Hydrogen and Fuel Cell Technologies	95,844	92,928	92,983
Solar Energy	269,050	257,058	282,300
Wind Energy	86,129	88,126	115,000
Water Power	54,687	58,565	62,500
Geothermal Technology	35,025	45,775	61,500
Advanced Manufacturing (formerly Industrial Technologies)	114,254	180,471	305,100
Federal Energy Management Program	28,265	28,248	36,200
Building Technologies	204,601	177,868	211,700
Weatherization and Intergovernmental Programs	188,234	230,862	304,700
<i>Weatherization Assistance Program</i>	131,705	173,896	227,600
<i>State Energy Program</i>	47,108	49,970	63,100
<i>Clean Energy Economic Development Partnerships</i>	0	0	14,000
Office of Indian Energy Policy and Programs * (formerly Tribal Energy Program under weatherization)	9,421	6,996	16,000
Facilities and Infrastructure (NREL)	24,880	45,973	56,000
Program Direction	160,455	162,000	160,000
Strategic Programs	23,554	23,540	21,779
Subtotal EERE	1,773,333	1,913,441	2,321,962
Adjustments (Includes Use and Rescission of Prior Year Balances)	-81,576	-12,800	-5,213
Total EERE	1,691,757	1,900,641	2,316,749

* This office is no longer under the Office of Energy Efficiency and Renewable Energy

USDA / DOE BIOENERGY PROGRAMS

Department of Energy Bioenergy Programs

The **Bioenergy Technologies Program** is part of DOE's Sustainable Transportation initiative within the Office of Energy Efficiency and Renewable Energy. The FY 2015 budget proposes funding of \$253.2 million, an increase of 9 percent above the FY 2014 appropriated level. The budget emphasizes "development of innovative processes to convert cellulosic and algal-based feedstocks to bio-based gasoline, jet and diesel fuels at a cost of \$3.00 per gallon gasoline equivalent." The Department of Energy is continuing its collaboration with the U.S. Department of Agriculture and the U.S. Navy to demonstrate commercial-scale biorefineries to produce military-specification fuels.

Within DOE's Office of Science, its Biological and Environmental Research (BER) initiative includes research regarding the redesign of microbes and plants for sustainable biofuels production. It is continuing support for the DOE Bioenergy Research Centers.

U.S. Department of Agriculture (USDA) Bioenergy & Sustainable Farms and Forests Programs

On February 7, 2014, the *Agricultural Act of 2014* (Farm Bill) was signed into law by President Obama, putting energy efficiency, renewable energy programs and conservation practices on a more stable path forward. While overall funding levels for the energy title programs for 2015 are reduced by approximately \$50 million (relative to 2014 funding levels), the Farm Bill contains **robust mandatory funding for the Energy Title Programs** over its five year authorization.

U.S. Department of Agriculture Farm Bill Energy Title Programs (Dollars in thousands)						
Program	FY 2013 Actual		FY 2014 Estimated		FY 2015 Budget Request	
	Mandatory	Discretionary	Mandatory	Discretionary	Mandatory	Discretionary
Sec. 9002 Biobased Markets Program	0	-	3,000	-	3,000	-
Sec. 9003 Biorefinery Assistance Guaranteed Loans	0	-	100,000	-	50,000	-
Sec. 9004 Repowering Assistance Payments	0	-	12,000	-	0	-
Sec. 9005 Bioenergy for Advanced Biofuels	0	-	15,000	-	15,000	-
Sec. 9006 Biodiesel Fuel Education Program	0	-	1,000	-	1,000	-
Sec. 9007 Rural Energy for America Loans	0	3,000	25,000	4,000	25,000	5,000
Sect. 9007 Rural Energy for America Grants	0	-	25,000	-	25,000	5,000
Sec. 9008 Biomass Research and Development	0	-	3,000	-	3,000	-
Sec. 9010 Biomass Crop Assistance Program	9,000	0	14,000*	-	14,000*	-
Total USDA Farm Bill Energy Title Programs (mandatory + discretionary)		12,000	202,000		146,000	
<i>*The Agricultural Act of 2014 provides 25 million in mandatory funding for FY 2014 and FY 2015.</i>						

Additionally, the President's FY 2015 USDA budget request also includes several new programs or increased funding levels for existing programs that will put **farms, forests and rural economies on a more sustainable path**. Climate change resiliency also receives increased attention and funding throughout the budget request. These programs include:

- The creation of a **\$954 million emergency disaster fund** that will be tapped when fire-fighting costs exceed set maximums. According to USDA, fire suppression has grown "from 13 percent of the agency's [U.S. Forest Service] budget just 10 years ago to over 40 percent in 2014".
- Funding of 2014 Farm Bill **conservation programs at \$5.4 billion**, including the **Environmental Quality Incentives (EQUIP) at \$1.35 billion**, a program that provides assistance to historically underserved producers to implement conservation practices.
- **Increased support for local sustainable forest initiatives** under the Integrated Resource Restoration (IRR) at \$820 million and Collaborative Forest Landscape Restoration Program (CFLRP) at \$60 million. These programs will decrease forests' hazardous fuels and increase healthy vegetation and habitat as well as the production of commercial timber and biomass.
- Several new programs that address **climate change and its role in forest and agricultural sustainability**, including \$32 million through the Agricultural and Food Research Initiative (AFRI) and \$44 million which is being reallocated for the creation of Regional Hubs for Risk Adaptation and Mitigation to Climate Change through the Agricultural Research Service (ARS).
- Creation of a public-private partnership to create a **National Network for Manufacturing Innovation**, which will focus on bio-manufacturing, bio-products development, deployment and commercialization. The network will be funded for a minimum of 5 years at \$25 million per year.
- A \$9 million increase of the **Agriculture and Food Research Initiative (AFRI)**, to \$325 million for FY15. Research areas include; climate variability research and its impacts (invasive species, water resources diseases), sustainable bioenergy and sustainable food production.

Department of Energy

The U.S. Department of Energy’s FY 2015 budget request for the Office of Energy Efficiency and Renewable Energy (EERE) is organized into three categories: Sustainable Transportation, Renewable Energy Generation, and **Energy Saving – Homes, Buildings, & Manufacturing**. Within this last category are **Building Technologies**, Weatherization & Intergovernmental programs, Advanced Manufacturing, and the Federal Energy Management Program (FEMP).

The FY 2015 budget includes **\$212 million for Building Technologies, a 19 percent increase** from the FY 2014 spending level. Priorities include appliance efficiency standards as a key strategy for reducing the building sector’s greenhouse gas emissions; building code compliance; and emerging technologies that can reduce building energy consumption by 50 percent or more, such as energy efficient lighting and air-conditioning systems.

Department of Energy Building Technologies Programs			
Dollars in Thousands			
	FY 2013 Current	FY 2014 Enacted	FY 2015 Budget Request
Commercial Building Integration (CBI)	33,956	30,782	28,000
Emerging Technologies	58,599	55,862	79,000
Energy Innovation Hub (Penn State)	22,843	9,994	10,000
Equipment and Buildings Standards	61,525	55,840	69,000
Residential Buildings Integration (RBI)	27,678	24,390	23,000
NREL Site-Wide Facility Support	0	1,000	2,700
Total	204,601	177,868	211,700

A 69 percent increase is proposed for **Advanced Manufacturing**, which supports activities that also improve building energy performance, such as technical assistance installing combined heat and power (CHP) systems and reducing energy and water use in small and medium manufacturing facilities. The additional funds would also support at least one new Clean Energy Manufacturing Innovation Institute, along with continued support of existing institutes. The Federal Energy Management Program helps federal building managers improve energy/water efficiency.

Upgrading the nation’s aging electricity grid is a major focus of the FY 2015 budget, with the goal of enhancing infrastructure resiliency and preparing for the effects of climate change. Funding from several programs including buildings, transportation and renewable energy would support R&D on “transactive” controls and grid integration.

Department of Housing and Urban Development (HUD)

The Department of Housing and Urban Development (HUD) FY2015 budget request increases the gross Budget Authority by 2.6 percent over FY2014 and by 10.1 percent over FY2013 sequestration levels, to \$46.66 billion. The information available at this time indicates that the budget requests an **energy efficiency “Pay for Success” pilot** program and an expansion of the **Moving to Work** program. It provides for up to \$80 million in transfers to the Transformation Initiative (TI) Fund, to transform HUD business practices, including "revising utility models to better reflect energy usage in HUD-assisted housing."

The **Choice Neighborhoods** program to transform neighborhoods of extreme poverty into sustainable, mixed-income communities is allocated \$120 million as a baseline request, compared to \$90 million enacted in 2014 and \$114 million in 2013. An additional \$280 million to transform 7-10 additional neighborhoods would be available if the President's proposed \$56 billion Growth, Opportunity and Security Initiative is enacted by closing tax loopholes and other proposed reforms. The Initiative would also enable \$75 million in funding to help communities create jobs and reduce the combined costs of housing and transportation, through the **Integrated Planning and Investment Grant** program, an interagency partnership with the DOT and the EPA. Of note, HUD has renamed the Office of Sustainable Housing and Communities to be the Office of Economic Resilience.

DEPARTMENT OF TRANSPORTATION

The proposed Department of Transportation (DOT) FY 2015 budget requests a total of **\$90.9 billion**, a **26 percent** increase over the \$72.3 billion appropriated for 2014. The budget includes a surface transportation reauthorization proposal which would supplement current Highway Trust Fund (HTF) revenue sources with \$150 billion over four years from proposed pro-growth tax reform. The proposal would take effect following the expiration of the *Moving Ahead for Progress in the 21st Century Act* (MAP-21) on September 30, with \$302 billion of spending over four years, an \$87 billion increase over currently authorized spending levels. This enables requested 2015 **increases** of \$7.6 billion for the Federal Highway Administration (FHWA), \$6.8 billion for the Federal Transit Administration (FTA), \$3.4 billion for the Federal Railroad Administration (FRA), and \$650 million for Transportation Investment Generating Economic Recovery (TIGER) grants. In addition, the current Highway Trust Fund, which has highway and transit accounts, would be renamed the **Transportation Trust Fund**, and two new accounts would be established within it for rail and intermodal transportation. Monies in the Trust Fund can be spent without going through the appropriations process.

The FY 2015 proposal would increase the **Federal Transit Administration's** budget by \$6.8 billion, to \$17.6 billion. It would enable the nation to make progress on the \$86 billion maintenance backlog that continues to increase, and to minimize higher congestion costs as urban populations grow. The Capital Investment Grants' budget increases by \$557 million to \$2.5 billion, and lists 26 New/Small Starts and Core Capacity projects that would be funded in 16 states. As part of the Creating Ladders of Opportunity initiative, the proposal requests \$500 million for a new Rapid Growth Area Transit Program focused on Bus Rapid Transit projects to link people to jobs and educational opportunities. A new Fixing and Accelerating Surface Transportation (FAST) competitive grant program is allocated \$500 million for innovative state and local solutions to address their most pressing transportation challenges – a Federal Highway Administration component of this program has been requested at the same funding level.

The **Federal Highway Administration** budget would increase by \$7.6 billion, to \$48.6 billion. A new Freight Program is allocated \$1 billion for multi-modal (rail, highway, port) projects that help address the greatest needs for the efficient movement of goods across the nation. A new Critical Immediate Investments Program ("Fix-it-First") is allocated \$4.9 billion to focus on reducing the number of structurally deficient Interstate Highway bridges. The \$836 million Transportation Alternatives Program supports the goal of livable communities, with improved access for pedestrians and bicycles.

The **Federal Railroad Administration** budget would increase by \$3.4 billion to \$5 billion. The previously separate Amtrak program (\$1.4 billion in FY14) would be included in a new Current Passenger Rail Service program to be allocated \$1 billion more than the current Amtrak budget. The additional funds would help repair and maintain public rail assets and current rail services. A new Rail Service Improvement Program is allocated \$2.3 billion to develop high-performance passenger rail networks.

In the budget proposal, the successful **TIGER** grant program is roughly doubled, an Interagency Permitting Improvement Center is established to enable agencies to review projects concurrently rather than serially, and a multimodal prevention and response Safe Transportation of Energy Products Fund is established.

Department of Transportation Programs			
(Dollars in Thousands)			
Program / Organization	FY 2013 Actual	FY 2014 Enacted	FY 2015 Budget Request
Office of the Secretary - National Infrastructure Investments (TIGER)	473,800	600,000	1,250,000
Office of the Secretary – Safe Transportation of Energy Products Fund			40,000
Office of the Secretary – Infrastructure Permitting Unit			8,000
Federal Highway Administration (FHWA)	40,320,900	40,941,800	48,562,200
Federal Transit Administration	10,597,000	10,841,800	17,649,400
Transit Formula Program	8,461,000	8,595,000	13,914,400
Capital Investment Grants/New Starts	1,855,000	1,942,900	2,500,000
Bus Rapid Transit	0	0	500,000
Fixing and Accelerating Surface Transportation	0	0	500,000
Washington Metropolitan Area Transit Authority	142,200	150,000	150,000
Transit Research and Training	41,700	43,000	60,000
Public Transportation Emergency Relief	0	0	25,000
Federal Rail Administration	1,546,300	1,603,400	4,995,400
Current Passenger Rail Service	--	--	2,450,000
(Operating Grants to Amtrak #	441,600	340,000	0)
(Capital and Debt Service Grants to Amtrak #	902,200	1,050,000	0)
Rail Service Improvement Program	--	--	2,325,000
Pipeline and Hazardous Materials Safety Administration	190,800	210,000	260,500
Federal Aviation Administration	15,235,700	15,760,200	15,410,500
Federal Maritime Administration	326,600	377,300	*367,300
National Highway Traffic Safety Administration	801,400	819,000	851,000
* Excludes \$291B for Ready Reserve Force transfer from DOD beginning in FY15			
# Currently included in budget separate from FRA, proposed to move into FRA in FY15 as Current Passenger Rail Service program			

Please see the budget review for DOE's Office of Energy Efficiency and Renewable Energy for information about sustainable transportation budget requests for advanced vehicle, bioenergy, and fuel cell technologies.

ENVIRONMENTAL PROTECTION AGENCY

The President's FY 2015 budget request for the Environmental Protection Agency (EPA) is **\$7.890 billion, a decrease of \$309.9 million** (3.79 percent) from FY 2014 enacted funding. The request for addressing **climate change and improving air quality** is \$1.03 billion, an increase of \$41 million from FY 2014, and includes funds to combat **climate change**, as well as funds for the **Energy STAR** program and the **Greenhouse Gas Reporting** Program.

The EPA breaks down its budget request into six overall goals. Two of those six goals address climate change and sustainable communities, and are highlighted below.

The FY 2015 EPA budget request also includes:

- \$2.7 million for **Federal Support for Air Quality Management**, an increase of \$2.5 million from the 2014 enacted budget.
- The **federal vehicle and fuel standards** initiatives would receive \$415 million.
- \$8.5 million is slated for the **Environmental Justice (EJ)** program, which incorporates the concerns of disproportionately impacted minority, low-income and tribal communities into rulemaking processes.

Environmental Protection Agency (Dollars in Thousands)			
Goal 1: Addressing Climate Change & Improving Air Quality	FY 2013 Enacted	FY 2014 Enacted	FY 2015 Budget Request
Address Climate Change	183,773	189,470	234,678
Improve Air Quality	720,420	744,413	741,931
Restore and Protect the Ozone Layer	16,725	16,799	17,319
Minimize Exposure to Radiation	34,730	34,365	37,252
Total, Addressing Climate Change & Improving Air Quality Goal	955,648	985,053	1,031,179
Goal 3: Cleaning up Communities & Advancing Sustainable Development			
Promote Sustainable & Livable Communities	451,416	455,794	457,466
Preserve Land	219,421	226,932	236,298
Restore Land	1,035,216	1,018,489	1,094,801
Strengthen Human Health & Environmental Protection in Indian Country	83,756	86,687	120,273
Total, Cleaning Up Communities & Advancing Sustainable Development	1,789,809	1,787,902	1,908,838

DEPARTMENT OF STATE

The **Department of State's** FY 2015 budget request includes **\$401 million** for international organizations that facilitate climate change resilience and provide affordable renewable energy to developing nations, **an increase of \$22.7 million** (6 percent) over FY 2014 levels. This includes approximately \$136.6 million for the Global Environment Facility (GEF), \$201 million for the Clean Technology Fund (CTF), and \$63 million for the Strategic Climate Fund (SCF). The Strategic Climate Fund includes funding for three programs: the Pilot Program for Climate Resilience (PPCR), the Forest Investment Program (FIP), and the Program for Scaling up Renewable Energy in Low-Income Countries (SREP).

Department of State (Dollars in Thousands)			
State Operations and Foreign Assistance Request	FY 2013 Actual	FY 2014 Estimate	FY 2015 Budget Request
Global Environment Facility	124,840	143,750	136,563
Clean Technology Fund	175,283	184,630	201,253
Strategic Climate Fund	47,374	49,900	63,184
Subtotal	374,497	378,280	401,000

In addition, the FY 2015 budget request for the Department of State includes **\$316.9 million** in bilateral development assistance for climate adaptation, clean energy, and the sustainable landscapes program within the Global Climate Change (GCC) priority area. The Ocean and International Environmental and Scientific Affairs (OES) program would receive **\$149 million** in the FY 2015 request. The OES supports, among other programs, the Clean Energy Ministerial, the Major Economies Forum on Energy and Climate, and the international Climate and Clean Air Coalition.

OTHER AGENCY HIGHLIGHTS

The **Department of Commerce's** \$8.8 billion budget request includes **\$3.39 billion** for the National Oceanic and Atmospheric Administration (NOAA), up \$90 million from FY 2014. The request once again includes a separate **\$2 billion** for the Geostationary Operational Environmental Satellite System, which will be used to improve weather predictions and modeling. The budget request includes \$482 million for NOAA's Office of Oceanic and Atmospheric Research (OAR). This is an increase of \$33 million over FY 2014.

The **Department of Defense (DOD)** budget provides support for energy efficiency initiatives, including improving fuel efficiency, developing new energy technologies, and expanding renewable energy resources. The Energy Conservation Investment Program, which supports renewable energy and energy efficiency projects at military bases, remains at the FY 2014 appropriations level of \$150 million. DOD is also entering into nearly \$1.2 billion worth of third-party-financed contracts for enhanced energy conservation performance.

The **Department of Interior (DOI)** budget request for renewable energy initiatives is **\$95 million**, an increase of \$3 million above FY 2014 enacted levels. The DOI climate change science budget is **\$72 million**, an increase of \$18 million.