

Department of Energy Strategic Plan Update

In May 2011, the Department of Energy (DOE) released its new Strategic Plan, a document that outlines the broad, cross-cutting and collaborative goals that stretch across our complex. It is intended to serve as a blueprint for the Department of Energy to help address the nation's energy, environmental, and nuclear challenges through transformative science and technology solutions.

The plan articulates how the Department's missions and programs are designed to bring the best minds and capabilities to bear on important problems. DOE draws on the diverse talents of our federal workforce, scientists and engineers from national laboratories, academia, and the private sector in multidisciplinary teams, striving to find solutions to the most complex and pressing challenges.

The Strategic Plan is organized into four distinct goals:

1. Catalyze the timely, material and efficient transformation of the nation's energy system and securing U.S. leadership in clean energy technologies,
2. Maintain a vibrant U.S. effort in science and engineering as a cornerstone of our economic prosperity with clear leadership in strategic areas,
3. Enhance nuclear security through defense, nonproliferation, and environmental efforts,
4. Establish an operational and adaptable framework that combines the best wisdom of all Department stakeholders to maximize mission success.

While the goals and principles of the Strategic Plan remain our guideposts, in accordance with the Government Performance and Results Modernization Act of 2010, the Department has prepared an addendum to its Strategic Plan that recognizes the new Agency Priority Goals and updates the status on several targeted outcomes within the plan.

Since September 2011, DOE has been working closely with the Office of Management and Budget to propose, discuss, and refine its selection of Agency Priority Goals for Fiscal Year 2012-2013. As a result, the Department has finalized and assigned leadership responsibility to eight priority goals. Four of these goals are updates to the Fiscal Year 2010-2011 High Priority Performance Goals and four are new goals.

Attachment 1 provides the new Priority Goals as they fit in the Strategic Plan. Attachment 2 provides updates to the 16 targeted outcomes in the Strategic Plan designated for 2011 and 2012, including whether the target will be retired or extended in FY 2013. Note that retirement of a targeted outcome does not mean that related activities will not continue.

Attachment 1: Priority Goal Updates to the Strategic Plan

Strategic Goal	New Priority Goal Statements
<p>Goal 1: Transform Our Energy Systems: Catalyze the timely, material, and efficient transformation of the nation’s energy system and secure U.S. leadership in clean energy technologies</p>	<p><u>Save low income families money and energy through weatherization retrofits.</u> From FY2010 through FY2013, in collaboration with HUD, enable the cost-effective energy retrofits of a total of 1.2 million housing units, of which more than 75% are low income. (updated target)</p>
	<p><u>Reduce consumer energy use and costs for household appliances.</u> By December 31, 2013, issue at least 9 new energy conservation standards to deliver net consumer savings of hundreds of billions of dollars over 30 years and require efficient products across domestic and international manufacturers. (new goal)</p>
	<p><u>Reduce the cost of batteries for electric drive vehicles to help increase the market for Plug-In Hybrids and All Electric Vehicles and thereby reduce petroleum use and greenhouse gas emissions.</u> By October 2013, demonstrate a prototype Plug-In Hybrid battery technology that is capable of achieving a cost of \$400/kWhr (useable energy) during high volume manufacturing (100,000 packs per year) compared to a 2008 baseline of \$1000/kWhr. (new goal; replaces the former battery manufacturing High Priority Performance Goal)</p>
	<p><u>Make solar energy as cheap as traditional sources of electricity.</u> By the end of the decade, drive the cost of solar electricity down to: \$1/W at utility scale; \$1.25/W at commercial scale; and \$1.50/W at residential scale. By Dec. 2013, demonstrate a prototype thin film or film silicon module with an efficiency of greater than 21% and a balance-of-system with a 50% reduction of the permitting and installation costs to \$1.50/W. (new goal; replaces the former High Priority Performance Goal to double renewable energy generation)</p>
<p>Goal 2: The Science and Engineering Enterprise: Maintain a vibrant U.S. effort in science and engineering as a cornerstone of our economic prosperity, with clear leadership in strategic areas</p>	<p><u>Prioritization of scientific facilities to ensure optimal benefit from Federal investments.</u> By September 30, 2013, formulate a 10-year prioritization of scientific facilities across the Office of Science based on (1) the ability of the facility to contribute to world-leading science, (2) the readiness of the facility for construction, and (3) an estimated construction and operations cost of the facility. (new goal)</p>

<p>Goal 3: Secure Our Nation: Enhance nuclear security through defense, nonproliferation, and environmental efforts</p>	<p><u>Maintain the U.S. nuclear weapons stockpile and dismantle excess nuclear weapons to meet national nuclear security requirements as assigned by the President through the Nuclear Posture Review.</u> Each year through 2013 and into the future, maintain 100% of warheads in the stockpile that are safe, secure, reliable, and available to the President for deployment. (updated target)</p>
	<p><u>Make significant progress toward securing the most vulnerable nuclear materials worldwide within four years.</u> By December 31, 2013, remove or dispose of a cumulative total of 4,353 kg of vulnerable nuclear material (highly enriched uranium and plutonium), and complete material protection, control and accounting (MPC&A) upgrades on a cumulative total of 229 buildings containing weapons usable material. (updated target)</p>
	<p><u>Reduce the Department's Cold War legacy environmental footprint.</u> By September 30, 2013 achieve a 71% reduction in DOE's cold war environmental footprint. (updated target)</p>

Attachment 2: Strategic Plan Targeted Outcomes Expiring in 2011 and 2012

Goal	Targeted Outcomes expiring in 2011-2012	Strategic Plan Update	Page
Goal 1: Transform Our Energy Systems	Double renewable energy generation (excluding conventional hydropower and biopower) by 2012 (High Priority Performance Goal).	Target on track and after 2012 will be replaced by program goals for SunShot (Priority Goal) and wind, and other renewables, including: "Reduce unsubsidized market levelized cost of energy (LCOE) for on-shore utility-scale wind energy systems to 7 cents/kWh by 2015, and 9.3 cents/kWh for offshore wind by 2020, to put us on a trajectory towards cost parity with traditional sources of electricity."	14
	Complete a comprehensive assessment—by September 2012—of materials degradation issues for light-water reactor plants operating beyond 60 years.	Target on track and will be retired	14
	ARPA-E will catalyze by FY 2012 the development of transformative and potentially disruptive energy technologies; drive the transition of high-impact energy innovations toward market adoption; contribute to the advancement of U.S. leadership and global competitiveness in energy innovation; and build itself as an innovative, highly effective, and sustainable organization.	Target on track for completion	17
	Develop cellulosic ethanol technologies by 2012 that can facilitate mature production costs less than \$2.00/gallon.	Target on track and after 2012 the program will shift R&D efforts from alcohol fuels to producing drop-in fuels and bio-products. The target is replaced by: "Develop biomass to hydrocarbon fuel conversion technologies at a \$4/GGE cost by 2015 in support of 2017 target of \$3/gallon for drop-ins such as renewable gasoline, diesel, and jet-fuel"	18
	Identify by 2012 the most promising educational opportunities to improve domestic energy literacy.	Target on track and will be retired	21
Goal 2: The Science and Engineering Enterprise	Exploit the National Ignition Facility by 2012 in a credible National Ignition Campaign and establish an open-science user program.	Target on track and will be retired	28
Goal 3: Secure Our Nation	Develop and apply advanced modeling and simulation tools in 2011 to accelerate progress on Environmental Management technical challenges	Target met	38
	Develop novel methods for addressing high-level waste that can accelerate progress and reduce costs of this multidecadal program, with a 2012 target date for the first demonstration	Target on track and will be retired	38

Goal 4: Management and Operational Excellence	Align functional and programmatic reporting and, where necessary, create organizational positions to focus and accelerate decision-making and accountability by 2011	Target on track and extended to 2013	42
	Develop governance principles relevant to balancing mission and risk, concurrence, transparency, and dispute resolution by 2011	Target on track and extended to 2013	42
	Measure and reduce our average time-to-hire for General Schedule positions and equivalent positions by every human resources office (from initiation date to entry on duty date) from 174 calendar days to an 80-day average that includes a 50-day target to job offer by the end of FY 2012.	Target on track and extended to 2013	42
	Complete at least 90% of our capital asset projects (achieving Critical Decision 4 [CD-4] project completion within a 3-year rolling timeline) at original scope and within 110% of the cost baseline by 2012	Target on track and extended to 2013	45
	Improve and continue to refine Department performance management systems and processes by 2012 so that they clearly link work to mission goals, expected outcomes, and accomplishment measures. Ensure that meaningful distinctions between levels of performance are identified and rewarded appropriately	Target on track and extended to 2013	46
	Create and deploy a quarterly reporting capability by 2011 for timely and reliable functional institutional cost information from our national laboratories	Target met	47
	Design and deploy a Department-wide advanced management information environment by 2011, enabled through state-of-the-art reporting and display tools, to provide timely and accurate information supporting in-depth program and project performance analysis and review	Target retired	47
	Implement a plan by 2012 for incident reporting and response in the Department.	Target changes to: "Design & Implement Phase I (Consolidated Incident Reporting)and Phase II (Improved Information Sharing) of Joint Cybersecurity Coordination Center (JC3) by 2013"	48