

Lugar Practical Energy and Climate Plan

Legislative Outline of DRAFT Bill

May 27, 2010

The Lugar Practical Energy and Climate Plan identifies a possible bipartisan framework for making meaningful progress on energy-driven national security, economic, and environmental concerns. It favors policies that will help Americans save money, help American businesses better compete, and minimize fiscal impact.

The policies identified in this legislative outline will produce measurable energy, monetary, and greenhouse gas savings. Preliminary analysis¹ of national impact indicates implementation of this plan will:

- **Reduce by two-thirds the need for foreign oil, or 1.75 billion barrels, by 2030;**
- Cut energy use by nearly 14%, or 11 quadrillion BTUs, by 2030; and
- Cut greenhouse gas emissions by 25% over business as usual, or approximately 2 gigatonnes, by 2030. This climate savings trajectory meets half of President Obama's 2020 climate goal.

These gains will come at **no cost to GDP** growth, will result in **no net job loss**, and will **save households 10% on electricity costs** on average. These conservative estimates do not include future savings from investing in efficiency today, jobs that will be created by burgeoning new energy markets, or improved global competitiveness as U.S. businesses cut energy costs.

The Plan favors flexible frameworks to address specific energy market failures, and seeks to minimize fiscal impact. Many colleagues have worked hard to develop thoughtful energy and climate proposals, and this plan builds on many of those ideas which are cited as "references" in each section below. Rather than reinvent the wheel, the Lugar Practical Energy and Climate Plan identifies a clear, consistent, and comprehensive set of policies backed by solid analysis.

Title I. Reducing Foreign Oil Dependence

Foreign oil dependence places an intolerable burden on United States national security and results in the export of hundreds of billions of dollars per year. The Lugar Practical Energy and Climate Plan targets reduced need for foreign oil, cutting dependence by an estimated 68% by 2030.

More than half (53%) of that gain is through vehicle efficiency – long-term, predictable improvements in fuel economy in our cars, trucks, and heavy duty vehicles, and revenue-neutral incentives for purchases of the most efficient vehicles in each class.

Increased production of domestic oil makes a sizable contribution. Enhanced oil recovery (EOR) is driven by the Diverse Energy Standard (Title III, Sec 1), since it will be the most cost effective means for initial carbon capture and storage. EOR accounts for 21% of reduced dependence on foreign oil, and increased oil production on the outer-continental shelf (OCS) accounts for 11%. The legislation contains no specific provisions to enhance outer-continental shelf (OCS) oil production – the primary driver of increased OCS production will be increased oil prices.

¹ Analysis conducted by the independent ClimateWorks Foundation, which has no position on the proposals.

Renewable fuels production displaces foreign oil need by 15%, and this plan boosts fiscally-responsible supports to achieve commercialization of advanced renewable fuels from diverse feedstocks while not altering the 21 billion gallon goal endorsed by Congress in the 2007 Renewable Fuels Standard.

Vehicle Efficiency

1. Extend fuel efficiency programs to encourage continued innovation. **Sec 101.**
 - a. After model year 2016, CAFE increases for passenger vehicles will reflect a goal of 4% annual efficiency improvements. A waiver will be available if the Secretary of Transportation demonstrates that the targets are unachievable.
Reference: Annual increase proposed in Obama-Lugar S.3694 (109th Congress)
 - b. Fuel efficiency standards for medium- and heavy-duty vehicles or components will be required by at least model year 2017, and will increase at least every 4 years. Such standards are currently under formulation, and this legislation will provide long-term certainty.
Reference: Builds upon authority first given to NHTSA in the 2007 Energy Independence and Security Act Sec 102(1)(C)
2. Encourage competition for fuel efficiency within each passenger and light-duty vehicle class by implementing a technology- and revenue-neutral “feebate” system in which purchases of the most efficient vehicle by class is rewarded with a rebate off-set by fees on the least efficient vehicle in that same class. **Sec 102.**
References: Bingaman-Snowe S. 1620 (Lugar original co-sponsor)

Fuel Choice

1. Include all advanced renewable fuels for eligibility for the currently existing reverse auction, established by Sec. 942 of the Energy Policy Act of 2005 and expands the authorization to \$250 million per year over five years. This fiscally-responsible program encourages low cost innovation in biofuels produced by diverse process and from diverse feedstocks. **Sec 111.**
2. Require that all new vehicles using combustion engine technology for propulsion sold in the United States be flex-fuel capable, allowing for more Americans to benefit from renewable fuels over the next decade and more. **Sec 112.**
 - a. Model years 2013 and 2014: 50% requirement
 - b. Model years 2015 and beyond: 90% requirement*References: similar to Harkin-Lugar S. 1627 and Brownback-Cantwell S. 835*

Title II. Energy Efficiency

Saving energy is the cheapest and easiest path toward energy security – and saving money. Each year, Americans unnecessarily, and usually unknowingly, lose billions of dollars through preventable energy waste. Failure to plug the energy leaks in our homes, businesses, and industries is a drag on economic recovery and impinges our global competitiveness.

Many energy efficient changes are available today and will pay for themselves in just a few years, yet well-known market failures impinge their adoption. The Lugar Practical Energy and Climate Plan targets money-saving efficiency policies: long-term energy improvement targets for new buildings and appliances, achieving a 5% retrofit rate in existing homes and a 2% rate in commercial buildings, reducing energy costs for industry, and committing to federal energy efficiency leadership. With these programs, we can cut energy demand by nearly 7% by 2030, slash greenhouse gas emissions by about 11%, and position Americans to save money for years to come.

National Building Energy Performance Standards (New Construction)

1. Establish mandatory targets for improved energy efficiency building performance measures for new residential and commercial construction. **Sec 201.**
 - a. The program would work with existing model code-setting organizations in developing codes and standards every three years, with the following targets:
 - i. Residential energy savings targets: 30% by 2012 and 50% by 2015
 - ii. Commercial energy savings targets: 30% by 2012 and 50% by 2017
 - b. The Department of Energy would partner with state and local governments to achieve the energy saving codes and standards targets, including offering up to a total of \$300 million per year over the next 5 years. If a State is unable to certify compliance with these target codes and standards, they will be at a disadvantage for receiving further Department grants.

References: Builds on ideas put forth in ACELA (Bingaman S. 1462); Waxman-Markey H.R. 2454 Sec. 201

Federal Building Efficiency

1. Require Federal Agencies to demonstrate leadership and save tax-payer money by enhanced energy efficiency in Federal buildings. All new Federal buildings entering the design phase in 2012 or later are designed to exceed national building performance standards. Such buildings should pursue cost-effective, innovative technologies and design strategies. **Sec 211.**

References: based on Executive Order 13514

National Building Retrofit Program

1. Leverages federal dollars to leverage private financing for energy efficiency retrofits in residential, small business, and commercial buildings. The Secretary of Energy is given authority to offer direct loans, loan guarantees, letters of credit, and other financial products to establish a self-sustaining program to incent front-end investments that will pay back – and save consumers money – over time. The \$2 billion investment would be paid back to the Federal government after leveraging from 5 to 15 times more private dollars. **Sec 241 – 244.**

References: Merkley-Lugar S.1574, modified

2. Working through existing facilities at the USDA Rural Utilities Service, works with non-profit rural electric cooperatives to offer low-interest to rural consumers for energy efficiency retrofits. Self-sustaining over time, participating consumers repay through the co-ops for the installation and material costs through their energy savings on their utility bills within not more than a 10 year window. Authorized for less than \$1 billion, the program would leverage an expected \$5 billion. **Sec 251.**

References: Merkley-Lugar S.3102, modified

Industrial Energy Efficiency

1. Authorizes Federal dollar-for-dollar matching for State-based loan programs to accelerate deployment of energy saving equipment and processes in the industrial sector. Low cost financing will help meet needs for up-front investments that will pay back over time and help American industrial competitiveness. **Sec 271.**

References: Senate Energy Committee S. 1462 Title II(A), modified

Appliance and Equipment Efficiency Standards

1. Build on existing appliance and equipment energy efficiency standard programs, accelerates implementation of improved standards. It also extends standards to include computer monitors and displays. **Sec 281.**
2. Requires Federal agencies to be early adopters of energy efficient products and services by targeting 95% of procurement contracts utilize the most efficient products, taking into account lifecycle cost effectiveness, when appropriate. It would also require implementation of best management practices for the energy-efficient management of servers and Federal data centers. **Sec 282.**

References: based on Executive Order 13514

Title III. Diverse Domestic Power

Our nation’s energy future will be more secure with greater diversity in use of domestic energy resources. A diverse domestic energy portfolio will drive job creation to meet expanded markets and help protect ratepayers from commodity price volatility. As we invest in the facilities that will power this country for decades to come, guiding investment toward reliable domestic power sources and cleaner technologies and resources is a prudent step toward reducing impacts on climate and pollution.

The Lugar Practical Energy and Climate Plan proposes a flexible system – in resources and timelines – to enable states and utilities to determine the energy mix that makes most sense to them within a national framework to keep America on track for energy security and climate stewardship. The Diverse Energy Standard framework, in complement with existing and expanded short-term incentives to help diverse technologies be proven commercially and the retirement of the most publicly costly conventional coal plants, will help establish a future for cleaner coal usage, boosting nuclear power, enhance deployment of diverse renewable power sources, and cut overall energy demand growth through efficiency gains.

Diverse Energy Standard

1. A long-term predictable framework for investment in diverse and cleaner energy resources will be established. **Sec 301.**
 - a. To maximize flexibility, key benchmarks are identified without rigid timeframes, and coupled with a three year deferral for States to meet the targets.

Calendar year:	Target percentage:
2015	15
2030	30
2050	50

- b. Additional flexibility is given in resources that would qualify to meet the standard, including renewable power sources, clean coal with carbon sequestration, nuclear, and authority to incorporate additional sources meeting similar standards. Energy savings through efficiency gains would also be included as a qualifying resources.
- c. A ‘credit’ system would be established to allow utilities greater ability to meet targets.
References: similar concept of Graham discussion draft of “Clean Energy Standard”

Retirement of most costly polluting coal plants

1. Establishes a voluntary retirement program for the nation’s most-polluting coal plants, comprising approximately 16% (49GW) of coal generation capacity. In return for relief from regulations that would require them to make costly investments in scrubbers over the next few years, participating plants would be able to continue operation until 2020. **Sec 302.**

Expanded loan guarantees for nuclear power

1. Additional \$36 billion in loan guarantee authority to help deploy first new nuclear power generation facilities. **Sec 303.**
References: FY2011 Budget Request.

Title IV. Measurement & Review of Energy & Climate Programs

Transparent monitoring of government energy and climate programs will help ensure that we are meeting our national goals and making wise use of taxpayer resources. Transparent accounting will enumerate for the American people the gains we are making as a nation and demonstrate American leadership internationally.

Transparent measurement and review

1. Require relevant Federal Agencies to review existing federal programs that should be included in monitoring of progress toward energy security and greenhouse gas reduction goals. **Sec 401.**
2. Require the Government Accountability Office to issue a study every two years that advises relevant Congressional committees on the results of the programs identified in this section and make appropriate recommendations. The study will examine effects:
 - a. Consumption, production, and import of oil and petroleum products;
 - b. National energy production and demand;
 - c. Greenhouse gas emissions; and
 - d. Technology advancement and deployment.

###